

# University of Calcutta

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# ANTHROPOLOGICAL NOTES ON SOME ASSAM CASTES

BY

DR. BHUPENDRANATH DATTA, A.M. (BROWN), DR. PHIL.  
(HAMBURG).

The subject-matter of this paper is the comparative anthropometrical study of some castes of Assam. For this reason, somatic measurements taken by me have been availed of. But I am keenly conscious of the defect in not having enough number of subjects from each caste examined, so as to get undisputed data on the somatology of each of these castes. I have taken twenty-nine kinds of physical measurements on each of the subjects, out of which some have been worked out here, *viz.*—

- |                             |                           |
|-----------------------------|---------------------------|
| 1. Colour of Eyes.          | 7. Circumference of Head. |
| 2. Colour of Hair.          | 8. Height of Nose.        |
| 3. Colour of Skin.          | 9. Breadth of Nose.       |
| 4. Maximum length of Head.  | 10. Nasal Index.          |
| 5. Maximum breadth of Head. | 11. Bizygomatic breadth.  |
| 6. Cephalic Index.          | 12. Stature.              |

In taking these measurements Martin's\* method has been followed, and Von Luschka has been consulted as well.

The subjects of the following castes have been examined:—

1. Kayastha	... 14 subjects.	11. Nath	... 8 subjects
2. Kalita	... 10 "	12. Mali	... 9 "
3. Brahman	... 12 "	13. Kaibarta	... 1 "
4. Ahom	... 9 "	14. Hangeh Dhang	... 1 "
5. Koch	... 4 "	15. Nafai	... 1 "
6. San	... 8 "	16. Dima	... 1 "
7. Khasi	... 10 "	17. Jalia	... 1 "
8. Rajbongsi	... 13 "	18. Hal-Chao	... 1 "
9. Moslem	... 3 "	19. Kalan	... 1 "
10. Gochari	... 5 "		

95

\* H. Martin, "Lehrbuch der Anthropologie," Band. I. Zweite Auflage, 1928. Von Luschka, "Anleitung zu wissenschaftlichen Beobachtungen auf dem Gebiete der Anthropologie, Ethnologie, und Urgeschichte. (Sonderausgabe aus Neumeyers Anleitung zu wissenschaftlichen Beobachtungen auf Reisen, 3. Auflage, Leipzig.)

*Thus the total number of the subjects is 95.*

In order to make a comparative study of somatic characteristics of these subjects the following table is given below.\*

By glancing at the table of somatic measurements it is to be seen that the range of variation in colour of the eyes, the range of variation is given by Prof. Rudolph Martin's "Eye Table". That means, the eye-colour of the subjects fall within the range of grey; of these three have the eye-colour numbering 7 and 8 which are, however, distinctly grey. Out of No. 8 is to be found in a subject (No. 16) of Kalita caste and another subject (No. 65) of Rajbansi caste, and No. 7 is to be found in a subject (No. 71) of Nath caste. The Cacharis who are purely a tribe from the eastern mountain range and speak a language which is now-a-days known as belonging to the Mon-Khmer language group, have dark-brown eye-colour, the range of variation being 2-4.

As regards the colour of hair (examined with E. Fischer's Hair Table), most of the subjects have black hair. No. 27 with the exception of three having tawny colour. The nature of hair texture that is to be found amongst the Assam subjects in consideration here are thus: Black, Black and wavy, Black and coarse, Black and curly, Tawny and fine, Tawny and stiff. Regarding this colour and texture of the hair, no line of demarcation can be drawn in caste matter, as different varieties are to be found within the members of the same caste.

Next comes the question of colour of skin. By applying Von Luschan's "Skin Colour Scale" it is found that the range of variation in this matter extends from Nos. 8 to 34. That is, there is a wide range of variation extending from very light (comparatively very fair) complexion to very dark (something like chocolate colour). By arbitrarily taking colour Nos. 1-9 as "very light," Nos. 10-21 as "light brown," Nos. 22-32 as "dark brown," Nos. 33-34 as "very dark," and Nos. 35-36 as "black" it is to be seen that amongst these subjects 1.05% may be called very light, 44.2% as dark brown, 5.26% as very dark. The pure "black" colour is conspicuous by its absence. Amongst the big groups mentioned in this paper, the Kayasthas have skin-colour ranging from Nos. 8 to 22, i.e., from very light to

\* *Vide p. 14-22.*



dark brown. The Kalitas have skin-colour ranging from Nos. 14 to 33, i.e., from light brown to very dark brown. The two Ahoms have skin-colour Nos. 12 and 13, i.e., they are light brown. The Keots, a so-called lower caste, who are engaged in fishing and agriculture, have the skin-colour ranging from Nos. 21 to 34, i.e., it varies from light brown to very dark. The subjects bearing Nos. 22 and 29, i.e., they are dark brown. The Nathas have skin-colour numbers varying from 22 to 34, i.e., from dark brown to very dark. The two Moslems have skin-colour numbers 15 and 16, i.e., they are light brown. The Rajbansis (Rajbansi and Koch) who are still the ruling caste in the state of Cooch-Behar in Bengal have the skin-colour ranging from Nos. 12 to 32, i.e., from light brown to dark brown. The Dosad subject has got skin-colour No. 34, i.e., very dark. The subjects and the remaining castes have skin-colour ranging from 20 to 34, i.e., from light brown to very dark. In total, the dark brown colour predominates; then comes the light brown colour.

Here it should be noted that the colour variations given in the abovementioned eye- and skin-colour tables do not suffice for the shades of colours that are to be found amongst the subjects mentioned in the paper. That means, there are more shades of colours amongst the Indian subjects than are to be found in the aforementioned tables.

Regarding cephalic indices of the Assam subjects, the variation ranges from 70 to 100, the average index being 800, standard deviation being 4.118. That means from hyperdolichocephaly to ultrabrachycephaly, all varieties do exist.

Amongst the numerous groups mentioned here, the *Kayasthas* have indices varying from 70 to 88, i.e., from hyperdolichocephaly to hyperbrachycephaly different varieties are to be found amongst them. The *Kalitas* have the range of variation extending from 74 to 100, i.e., from dolichocephaly to ultra-brachycephaly different varieties exist amongst them. Of course the solitary instance of index No. 100 may be counted as an abnormality. The *Brahmans* have the indices numbers ranging from 78 to 83, i.e., the mesocephals and brachycephals are to be found amongst them. The two *Ahoms* have Nos. 79 and 84, i.e., they are respectively mesocephals and brachycephals. The

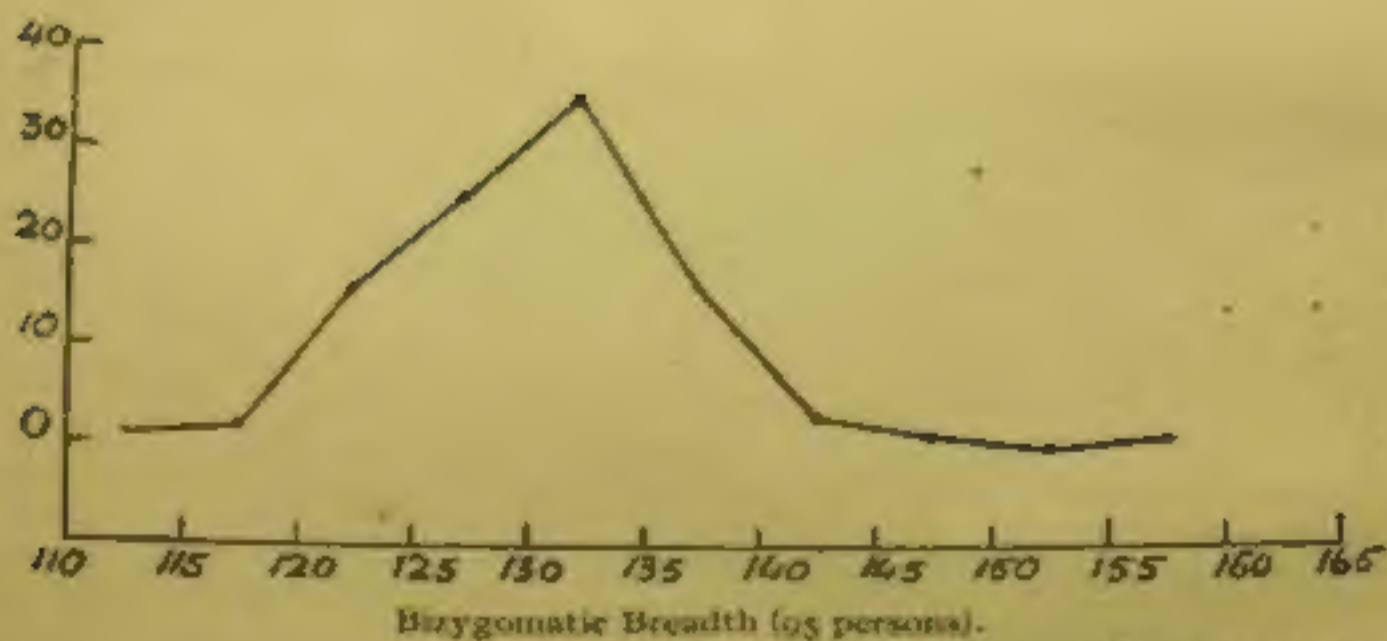
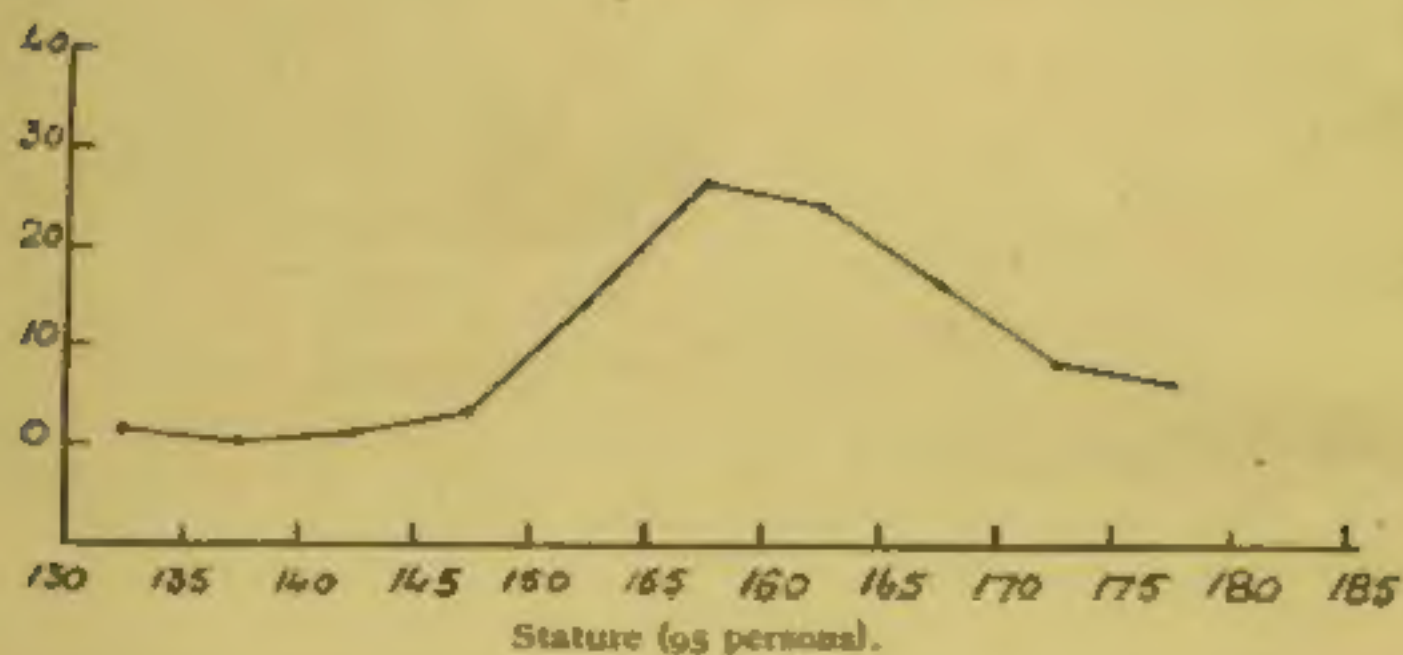




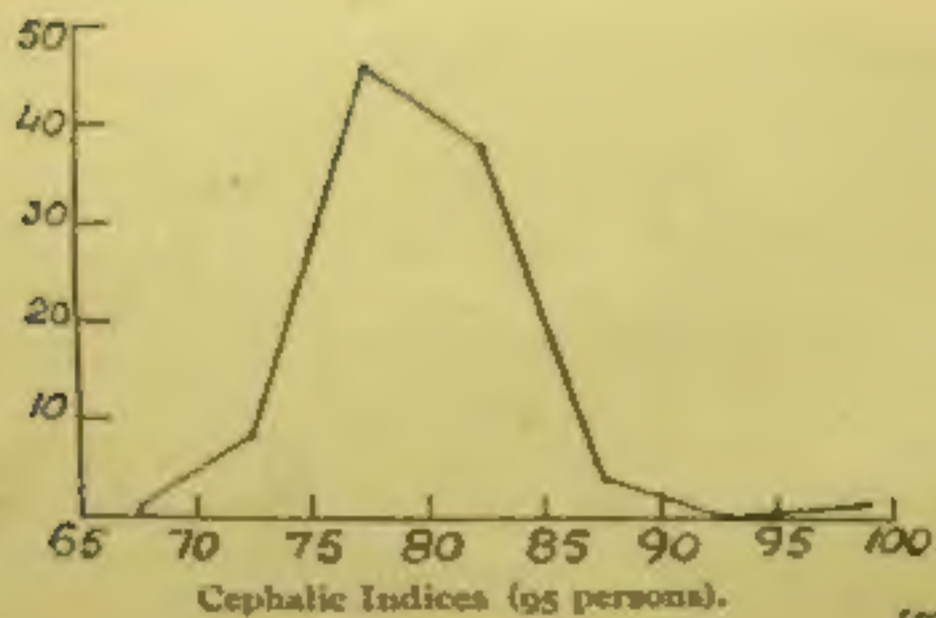
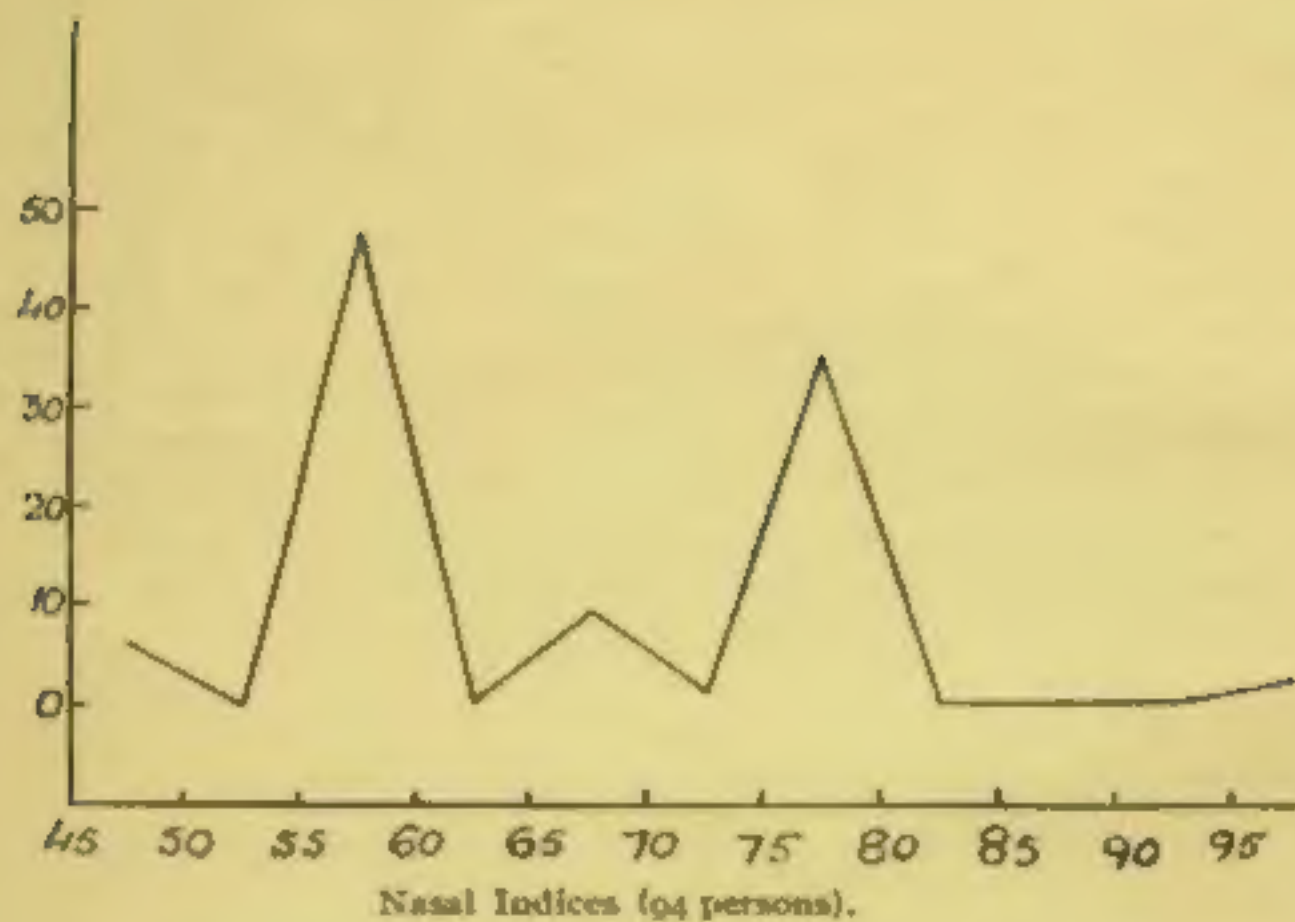
*Koch* and *Rajbansis* (they are the same caste) have the numbers ranging from 72 to 83, i.e., the varieties extending from dolichocephaly to brachycephaly are to be found amongst them. The *Keots* have indices ranging from 74 to 83, i.e., from dolichocephaly to brachycephaly varieties are to be found amongst them. The *Naths* have cephalic indices varying from 78 to 83, i.e., they have mesocephalic and brachycephalic characteristics amongst them. As regards the solitary examples of two *Sans*, they have indices of 74 and 79, i.e., they are of dolichocephalic and mesocephalic characteristics. As regards the two *Moslem* subjects who are put here for comparison, they have the identical index of 83, i.e., they are brachycephals.

The average Nasal index of the Assam subjects is 67.85, S. 11.05 and the range of variation extends from 50 to 100. That means, from hyperleptorrhine to hyperchamoerhine characteristics all varieties are to be found amongst them. Amongst these, the *Kagusthas* have the nasal indices ranging from 60 to 100, i.e., from leptorrhine to chamoerhine all characteristics exist amongst them.

Amongst the *Kalits* twelve subjects have the indices ranging from 50 to 67 which signify their leptorrhine characteristic, while five have No. 80 which falls within mesorrhine group and there is a solitary instance of index No. 100 which is of chamoerhine characteristic. Amongst the *Brahmans* seven subjects have the indices varying from 50 to 67 which show that they are leptorrhines, five subjects have the index of 80 which signify their mesorrhine character. The two *Ahoms* have the identical nasal index of 80 which makes them fall within the mesorrhine group. Amongst the *Rajbansis* and *Koch*, twelve subjects have the indices varying from 50 to 67 which make them leptorrhines, while the remaining four have the indices ranging from 78 to 80, i.e., they are mesorrhines. Amongst the *Cacharis* one is a leptorrhine (index No. 60), three are mesorrhines (index No. 80), while the remainder is chamoerhine (index No. 100). Amongst the *Naths*, four have the range of variation from 50 to 60, i.e., they are leptorrhines, while the remaining one is a mesorrhine (index No. 80). Amongst the two *Mohs*, the one is a leptorrhine (No. 60) while the other is mesorrhine (index No. 80). The two *Sans* are likewise leptorrhine (index No. 67) and mesorrhine (index No. 80). The same is the case with the two *Moslem* subjects.







As regards stature, the range of variation extends from 131 cm. to 180 cm., i.e. from "Small" to "Tall" various groups exist amongst these subjects.

By examining the cephalic index curve of the subjects of the Assam castes in question here, one sees that the highest point reached in the curve is between the indices numbers 76-80 (i.e. 6%) and there are lower points on the right and left of it. It shows the asymmetry of the curve which proves that it is composed of heterogeneous elements. The lowest point falling on the left of it is within the indices area 68-70 (1%) and the lowest point on the right of it falls within the area 96-100 (1%). The curve shows that it covers a dolichocephalic area extending from 68 to 75 reaching its highest percentage at 9%, and a mesocephalic area extending from 76 to 80 having its highest percentage at 46%, and a brachycephalic area extending from 81 to 100. The highest percentage reached in this group is 4%. By counting dolichocephaly and mesocephaly as the two varieties of the same characteristic, we find that the majority of the subjects mentioned in this paper are of long-skulled variety, i.e., they are *dolichoids*.

By looking at the nasal indices curve, we find the indices to be grouped into two important areas, with smaller areas around them. The peak of the biggest area falls between the indices Nos. 56-60 (47%) while the other peak falls between Nos. 76-80 (34%). The curve shows the heterogeneous characteristic of the nasal form of the subjects, the majority being leptorrhines while the rest are mesorrhines and chamæorrhines, the last being 2%.

By examining the bizygomatic breadth (average 130, S. D. 2.22) curve it is to be seen that the highest concentration falls within the indices area of 131-135 (35%). But there are higher and smaller index numbers around it.

By regarding the stature (average 161.77 cm., S. D. 7.8) curve it is to be seen that it is an asymmetrical curve having its highest point falling between indices numbers 156-160 (26%), which shows that this area falls within the category of "medium-sized." The curve betrays the non-homogeneous character of the subjects in the matter of stature also. The curve further shows that about 29% (131-155 cm.) falls within the nomenclature "short," about 46% (158-167 cm.)





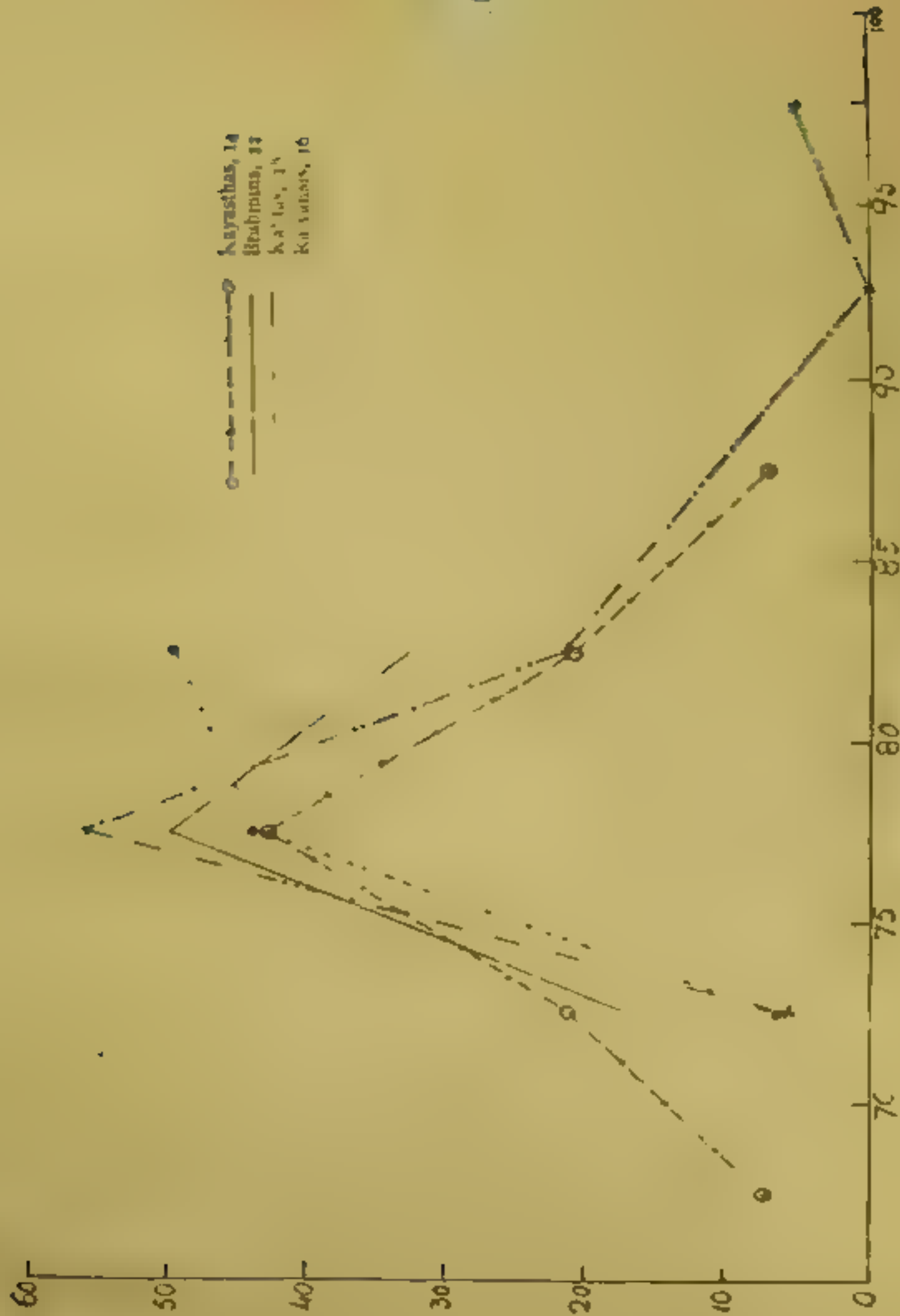
"medium sized" and 25% as "tall". Of course there are extreme "short" (pygmy) and extreme "tall" individuals within the extremities of these groups.

By making a comparative study of the cephalic index curves of the four important castes mentioned in the paper it is to be seen that the highest point of the "dolichocephal" area with the Brahmans falls in the same area with 15% with the Koch and the Raybansas the highest point within the "dolichocephal" area is reached also in the same area with 44% with the Khatas it is reached at the same area with 35%.

On the other hand, the highest point of the brachycephal area with the Brahmans falls at the N = 81.8 (33%), with the Kayasthas at 81.86 (27%) besides it, there is a hyperbrachycephalic area at 80.89 (27% with the Koch and Raybansas at 81.85 (31%), with the Khatas at 81.55 (22%) while there is a big hyperbrachycephalic area covering the indices 80.90 and 96.100 (total 16%).

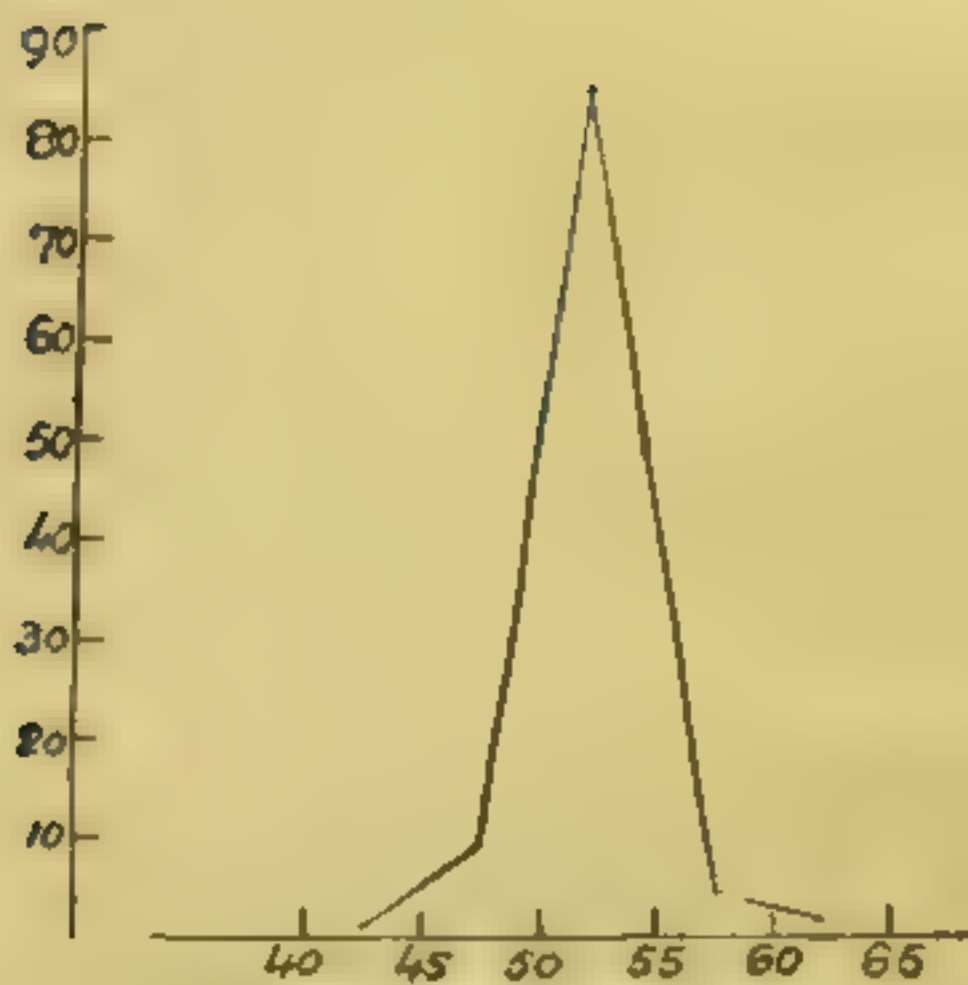
Thus by making a comparison of the cephalic index curves of these castes, we have found out that though the figures of the curves do not agree yet there is a substantial agreement regarding the highest points reached in the dolichocephalic variety of the skull form and there are wide divergences in the brachycephal form regarding the highest points reached in the area. Of these the points reached by the Kayasthas and the Koch approach each other while the points reached by the Brahmans and the Khatas are nearer to each other than to the rest. In the brachycephal area we see Kayasthas and Khatas have reached points nearer to each other, while the others are widely divergent from the rest. Finally it is to be seen that first the Brahmans then the Kayasthas have the largest number of dolichocephals within them, while the Koch and Raybansas have the largest number of brachycephals in them, and the Kayasthas have the smallest number of the same.

The comparative study of the nasal index curves shows that the highest point of leptorhiny with the Brahmans falls within the indices 66.60 (42%) with the Koch within the same indices (56%), with the Kayasthas with the same indices (43%), with the Khatas with the same (61%).



Comparative Cephalic Indices (no persons).





Head Circumference Curve—95 persons

[To face p. 7.

On the other hand the highest point of concentration with the Brahmans falls within 76-80 (12%), with the Koch and Kayasthas within the identical indices (10%), with the Kayasthas within the indices (21%) with the Kalitas at the same place (28%).

As regards pharyngeality which is to be met only with the Kayasthas, the point falls within the indices 100-7 (5%).

By making a comparison of nasal ridges we have found out that there is an identical agreement regarding the index of the leptorhine and mesorhine areas of the castes compared here. It is evident that these castes have similar characteristics in common amongst them though in different percentages, as regards pharyngeality being found amongst the Kayasthas, and that being represented by the solitary instance of one subject only it may be called as an aberrant one. It seems that on the average leptorhine element is dominant, the same phenomenon has also been noticed in the case of the indices of the total number of the subjects.

By looking into the column of the bizygomatic breadth indices in the list of measurements we find that the maximum breadth is reached in a Chikar (15.7), while the lowest figure is reached in a Kalita (11.5). On the other hand by looking at the curve we find that the highest point of concentration is reached between the indices 14.1-14.5 (15%), and though the curve is an asymmetrical one, yet there are gradations within it. Thus it seems that as regards bizygomatic breadth these groups are not widely divergent from one another.

By glancing at the stature indices we find that ranging from the index No. 141 cm. in the case of a subject of the Nath caste to 180 cm. in the case of a subject of the same caste, there is a gradation of variation. In the matter of stature barring the subject bearing index No. 141 cm. which may be said to be abnormal, it cannot be said that the Assam groups are widely divergent from one another.

Regarding head circumference curve (average 52.9%, S.D. 4.28) it is to be seen that the highest point of concentration falls within the indices 51.55 (8.4%).

As regards the somatic characteristics of the two Moslem subjects which have been put here for comparison, it can be said that in somatic characteristics they are indistinguishable from their Hindu



neighbours—both of them have black and coarse hair in common with some Hircas and one (No. 98) has the somatic combination of brachycephalic leptorrhine characteristics, the other (No. 96) is a brachycephalic-mesorrhine one. As regards stature the former is of "median" size while the latter falls within the category of "tall."

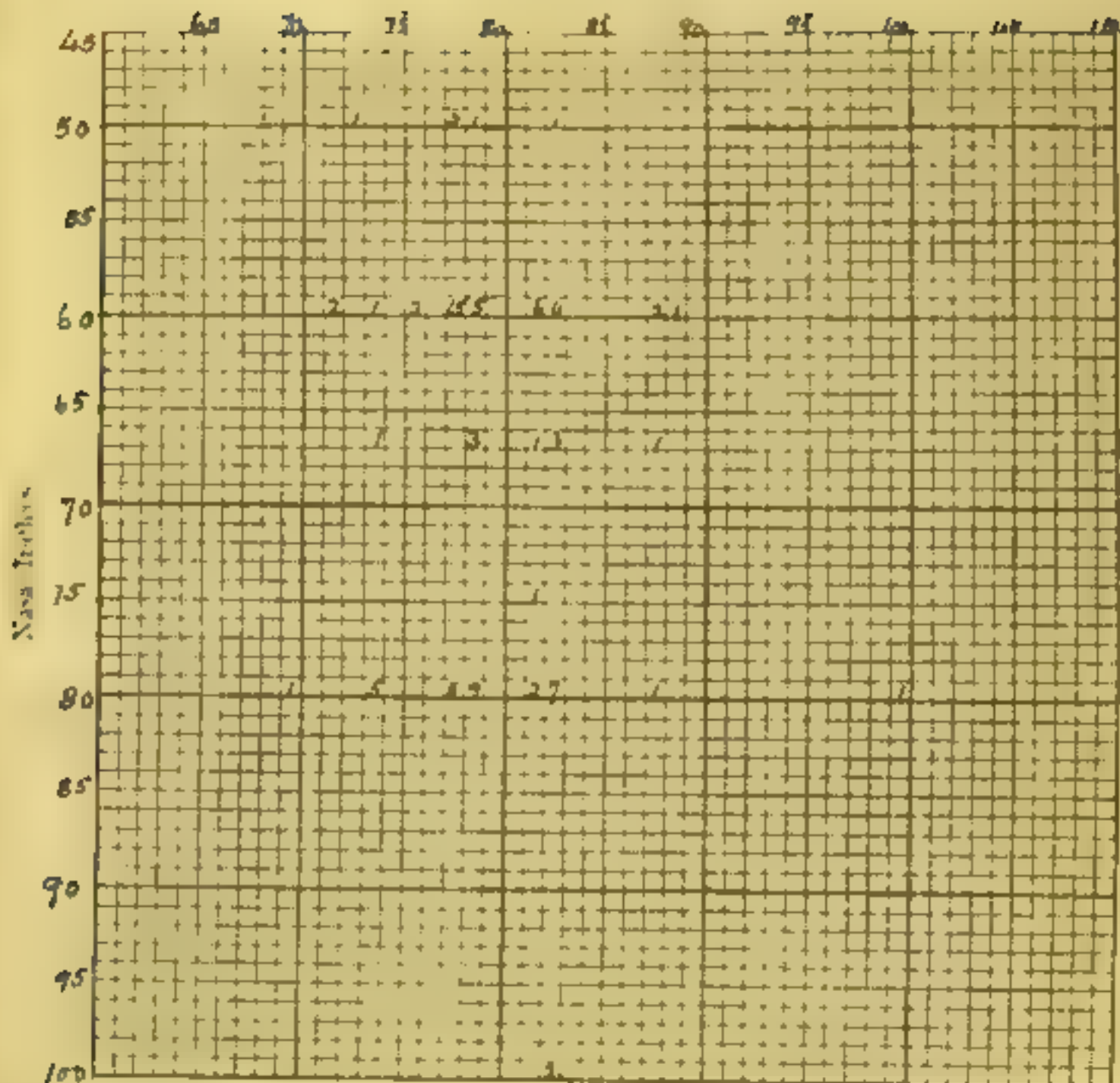
As regards the standard deviations of the cephalic and nasal indices it is to be seen that the nasal indices are more variable than the cephalic indices—while the least amount of somatic variability is to be found in the case of bizygomatic breadth.

Finally, we have seen that the Assam groups on the average are of long-headed leptorrhine character and by making further analysis of the same by referring to the cephalic and nasal indices correlation table of ninety-four subjects it is to be seen that 5 subjects are of the dolichocephalic-leptorrhine combination type, 29 are of mesocephalic-leptorrhine type, 20 are of brachycephalic-leptorrhine type, 6 are of dolichocephalic-mesorrhine type, 14 are of mesocephalic-mesorrhine type, 12 are of brachycephalic-mesorrhine type, 2 are of brachycephalic-chamaerhine type. Out of these 4 are of dolicho-leptorrhine characteristics, 29 are of dolicho-mesorrhine characteristics, 20 are of brachycephalic-leptorrhine characteristics, 12 are of brachycephalic-mesorrhine characteristics, 2 are of brachycephalic-chamaerhine characteristics.

Thus it thus hat it is to be seen that the dolicho-leptorrhine type is in minority, and next in number comes the brachycephalic-mesorrhine type while the brachycephalic-chamaerhine type is conspicuously the fewness of its number.

Further, by referring to the stature and cephalic indices correlation table, it is to be seen that there are following combinations: 2 are dolichocephalic-short, 5 are dolicho-medium, 4 are dolicho-tall, 1 is dolicho-very tall, 2 are mesocephalic-pygmy, 14 are meso-short, 23 are meso-medium, 2 are meso-tall, 3 are meso-very tall, 11 are brachycephalic-pygmy, 16 are brachy-medium, 3 are brachy-tall, 3 are brachy-very tall, 1 is hyperbrachy-short, 4 are hyperbrachy-medium, while hyperbrachy-tall and very tall are conspicuous by their absence. Again by taking dolichocephalic and mesocephalic together as dolichoids, and by taking brachycephalic and hyperbrachycephalic as general

# Cephalic Indices



Cephalic and Nasal Indices Correlation Table (104 persons)

[To face p. 5]



Cephalic Index	Stature									
	145	150	155	160	165	170	175	180	185	190
70										
75										
80										
85										
90										
95										
100										

Cephalic Ind. x and Stature Correlation Table 45 persons

brachycephalic, broadskulled variety, we see that there are 4 dolichocephalic, 10 are subbrachycephalic, 27 are dolichocephalic median, 6 are dolichocephalic, 4 are dolichocephalic very tall, whereas the general tendency cephalic broadskulled variety the brachycephalic is absent, 12 are brachycephalic short, 22 are brachycephalic median, 5 are brachycephalic very tall. As regards stature we find the dolichocephalic variety in 50, while the brachycephalic variety is 40. This is an indication of a trend of the dolichocephalic variety preponderates over the brachycephalic ones. As has been well known the exception rather than the rule is to be observed in the table of correlation of cephalic and racial indices.

Here, the analysis of the racial characteristics of some of the castes of Assam mentioned in this paper is at an end. Here we do not meet with a homogeneous population. The somatic characteristics vary with the groups. In total, the traces of different racial elements are to be met in the province of Assam. There are a few subjects with traces of "Mongolian fold" in the eyes, some have good pituitary system in the body while a good many subjects have prominent, high cheek bones. If we study these somatic characteristics, no line of demarcation can be drawn in the matter of caste and region. Thus it is evident that there are common elements present in all the groups. Finally we have found out that there are different footpegs existing in the province of which the dolichocephalic type is in majority and then comes the brachycephalic type. Naturally the question arises from where comes this heterogeneity?

In the lands of the province of Assam dwell many non-Aryan speaking tribes who are supposed to have "East Asiatic affinities". In Herbert Huxley's "Temple of India" the average cephalic indices of the Thakans of Eastern Himalayas and the Kamti of Assam are given as 81.5 and 82.2 and the nasal indices are given as 82.2 and 81.7. These make them fall under the concentration of brachycephalic mesothalic group. As this element exists in the hills it will not be a wonder to find it amongst the men of the plain lying down below. But strangely the five caste subjects mentioned in this paper have the average cephalic index of 89.0, and nasal index of

\* Dr. D. R. Chopra speaks of "East Asiatic affinities" in Assam and Northern Burma, *Indo-European Index*, Vol. I, p. 111.

† H. Huxley, "Temple of India" Appendix IV, pp. 150-151.

8000 etc., they are mesocephalic and the brachycephal-mesotric element is fairly represented in our Assam groups, yet the presence of the element having a median parietal angle at our objects may be accounted for by the fact that proximity of the province through it is to be found among the population of Northern India. As regards the presence of other elements, a reference to the biometrical analysis of bones of a total of several castes ranging from the Punjab to Bengal can be made in "Anthrop."\* where the writer of this article has shown that the dolichocephalic element though present in most of the castes of North India, is to be found in overwhelming numbers amongst the Jat Sikhs of the Punjab and the brahmins of the left bank element is to be found in Ganga Valley as well. It is also to be found in Benial castes of being present in strong numbers in the Brahamins, Kayasths and Chandel castes. Again with the exception of the Jat Sikhs and the castes of Northern India have dolichocephalic element in overwhelming large numbers. Further, the studies of the South India castes show that on the average this character is predominant there. Thus one may opine that as far as the cranium type is the prevalent type in India, hence one would not wonder if the element is to be found amongst the Hindus of Assam.

Thus we see that the various brachy types that exist in North India (India north of the Andhra range) are also to be found in this North-Eastern province. For this reason, it can be said that these people of Assam with respect to cranium are not isolated from the rest of India and that they have racial affinity with the people of Northern India. The only way to see is that they have conserved so much of dolichocephalic and brachycephalic elements which are accepted to be of West Asian affinity in them, when one recalls the fact that some of them must have blood of East Asiatic affinities as is shown by the presence of "Mongolian fold" in the eyes and prominent cheek bones as mentioned in the paper.

Finally we have seen that the groups are not widely divergent from each other. These castes have no racial basis. There are

\* — See the skeleton system by Independent study Datta in "Anthropog.", Band XXII, 1927, Assam.

† — See Bailey's "Peoples of India" Appendix and also Thurston.



minute of exact notice which are common amongst them. This is further attested by the social fact that with the exception of the Brahmans I have not heard an instance the contrary; other castes intermarry amongst themselves, i.e. the daughter of a man of higher caste is given in marriage to a man of lower caste, though vice versa is not allowed.

### *Ethnological Notes.*

Many of the Hindu castes of Assam are identical with that of Bengal. In ancient times the northern portion of Bengal and the present District of Kamrup of Assam formed one kingdom of Kamrup. The ancient traditions of Naraka Raja and Bhagadatta are the common traditions of both the provinces. The languages of both the provinces are very similar with each other, and the script is the same in both cases.

There are two sorts of Brahmans, Kayasthas and Vaidiks. The former claim to have migrated from Kausambi (United Provinces), while the latter claim to have come from the south. The latter has got such family titles as Chakrabarti, a name common among the Bengal Brahmans. But these Brahmans do not claim any Bengalee parentage though a priest of Kousaleya temple (himself a Vaidik) told me that the other group is of Bengalee extraction in section of the Bengal Brahmans also claim Kayastha descent. Some Brahmans with the family name of 'Goswami' trace their descent from Bengal.

The Kayasthas also claim Kayastha descent, he even claim is put forward by some of the Bengal Kayasthas. Some have family titles as "Das" - "Datta," is common with Bengal Kayasthas. In the case of subject No. 3, the main surname caste and *gotra* are identical with good many Kayastha Dattas of Bengal. But they all vehemently deny to have any connection with the same castes of Bengal.

Some of the cultivators call themselves Kayasthas. They call themselves as "Chak Kayasthas" as a title like with the subject No. 18.

The Katis are a cultivating caste. They are peculiar to Assam, though some of them have settled in some northern parts of Bengal. In good many cases they pass themselves off as Kayasthas, as in the case with the subject No. 15 who claims to be a Kati and a Kayastha (at the same time).

The *Kachars* are the *Chakmas* of the province but the province has taken its present name. They are said to have migrated from south-eastern parts of Asia to this province but at present they are completely British and have got liberal education (we have a 'Kachapa'). The two tribes mentioned in the paper show East Asiatic traces in their skeleton composition, eye, nose, forehead, broad nose, high cheek bones, etc., etc., and hair in the eyes and other. (No. 10) having broad nose and high cheek bones. Further they have dark and coarse hair.

The *Kachars* and *Mechas* are two more caste. It is said that the *Kach* and *Mech* were originally mountain tribes who migrated to North Bengal long ago. They are Hindus but are regarded as 'Untouchable' Hindus out of whose hands the Hindu cannot drink water. 'Kachbanar' is the new appellation taken by them. In North Bengal they are calling themselves 'Kachbans'. The *Kach* are with the many caste in Cooch-Bihar. The *Kach* and *Kachbans* have migrated to Assam long before and these people of both the provinces are members of the same community.

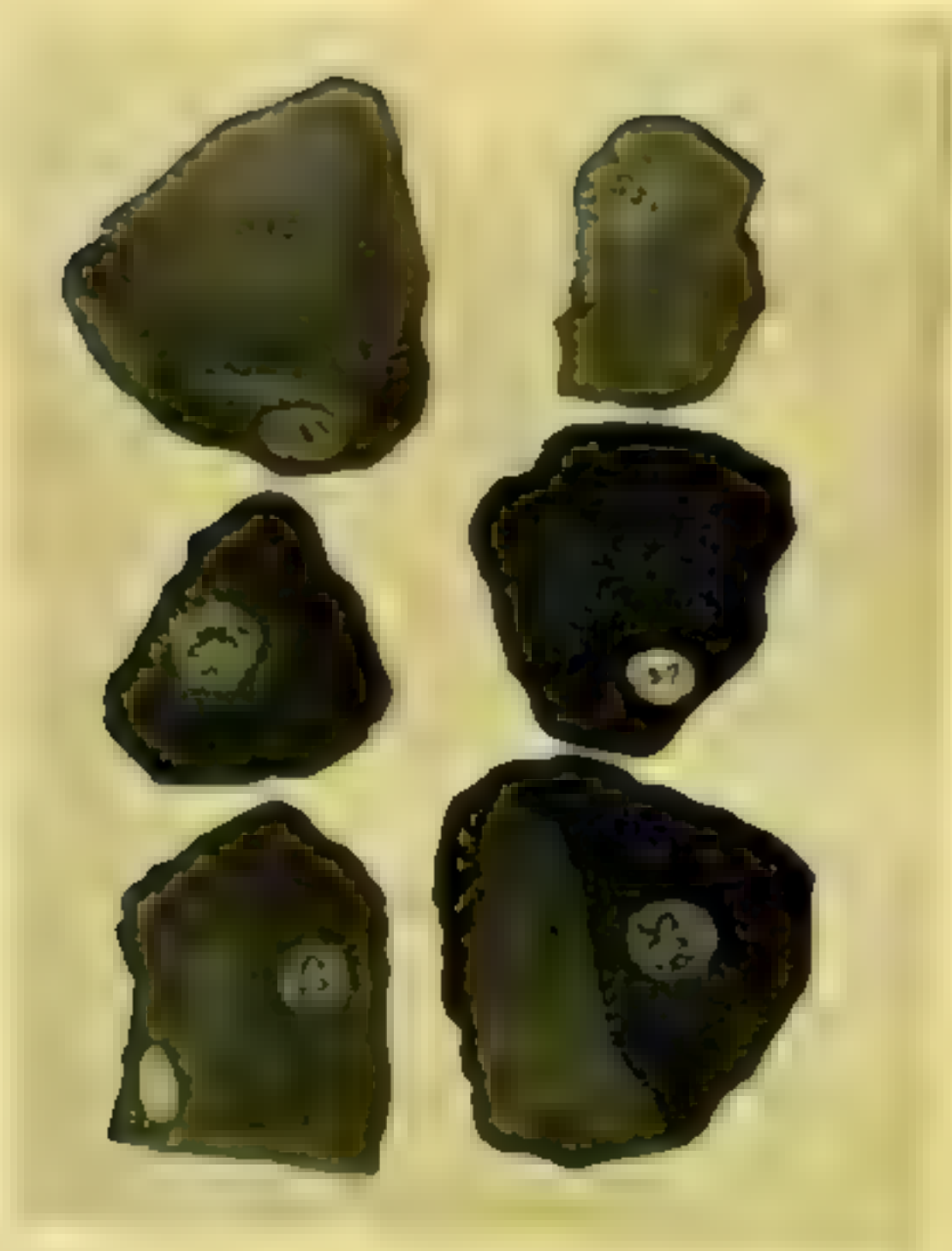
The *Kach* are a Hindu caste. This caste exists in Bengal as well.

The *Kach* are a Hindu and a caste. This caste exists in Bengal and in the North Bengal valley as well.

The *Kach* are originally were a religious group followers of Gorkh and Miranath. The temple of Gorkh is the leader of this religion and exists in the town of Gorkh (Gorkh) where the followers of the same cult are to be found as well. I have found them to be existing as a caste in the province of Assam and Bengal.

The *Kach* are a caste originally given to gardening. This caste exists in Bengal as well.

The *Kach* are the dwellers of the hills of Cooch. The subject in question in this paper being the colony which has settled down in the plains of Assam. They have a language of their own and they do not call themselves Hindu though they claim to be the descendants of the Hindu hero Rama of the Mahabharata. They have an animistic sort of religion and they worship Manasa tree (*Euphorbia corollata*) which they call 'Bansara' (I believe that is their totem). They eat anything except beef (perhaps that is



Paleolithic flakes from the Punjab.

(To face p. 13.)



due to their constant contact with the Hindus. They offer wine and  
sacks to their god or gods though they claim to worship all the Hindu  
gods in their own language, but they do not get the Brahmins for  
their priests. Yet they wear a tuft of hair on the occiput like all  
other orthodox Hindus. Many of them have prominent cheek bones,  
'Mongolian folds' in their eyes, black and stiff hair, have no sign of  
beard and moustache on their face, and have the Mongolian cut of  
face. They are in each village a group.

## Synoptic Measurements of Asian Cuckoos

N.B.—Measurements have been taken in centimeters.

Serial No.	State	Native	Colour of eyes	Colour of throat	Length of bill	Maximum length of head	Maximum breadth of head	Cephalic index	Circumference of head	Height of dome	Breadth of wing	Wing index	Alar expanse	Stretch	Remarks	Local name
1	Kanpur	Prasanna (Ch. Barua)	4	Black and grey	8	17.5	12.2	68.23	23.5	5.6	7.2	6.2	16.3	16.3	16.3	Lat. & prom- nent high above head, good posture typical
2	"	Harpal Singh	2	Black	10	18.1	14.3	71.7	31.9	6.2	3.4	6.3	12.6	16.3	16.3	Small, high above head, poor posture typical
3	"	Phiroog Singh Datta	1	Black and grey	13	19.2	16.3	70.0	36.6	5.3	5.8	6.3	22.2	16.3	16.3	"
4	"	Pandit S. S. Sanyal	1	Black	10	19.6	18.4	73.08	33.6	5.3	5.3	6.3	22.2	16.3	16.3	Two spots above head on forehead distinct
5	"	Jugalkishore Barua	1	"	16	18.1	16.3	77.7	32.8	5.4	5.4	6.3	13.7	16.3	16.3	"
6	"	Prasanna Kumar Barua	2	Black and grey	11	17.6	16.6	69.23	34.1	4.5	4.0	10.0	13.3	14.2	14.2	"

10	Male Mabury	17	184	244	277	224	47	5.0	120	148	Torhol	F. 2 new
11	Female Mabury	1	17	185	253	2621	564	47	3.0	170	170	Good young system.
12	Female Mabury	2	16	176	250	6033	524	41	3.0	172	172	Good young system new head head as per prior to ed light side
13	Female Mabury	3	14	183	248	2322	529	53	3.0	185	185	Female of bat on body
14	Female Mabury	4	14	190	253	2494	527	51	3.0	185	185	New young at end good female system.
15	Female Mabury	5	14	191	246	2814	540	47	3.1	20	179	North G. 1st
16	Female Mabury	6	13	249	249	2494	541	55	3.1	60	178	Good at end of bat body
17	Female Mabury	7	23	248	246	3368	527	51	3.0	174	174	Good young system
18	Female Mabury	8	21	244	237	1470	514	53	3.0	182	182	Good young system

\* Black studies for F. edwards, No. 97 of "Harvardian Tables."

† The subject No. 16 says he belongs to the "Kashmiri" (Kashmiri) but at present comes to be a "Kashmiri" (Kashmiri).



Period	Case	Age	Sex	Occupation	Marital Status	Religion	Education	Income	Assets	Liabilities	Net Worth	Remarks
10	10	10	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
11	11	11	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
12	12	12	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
13	13	13	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
14	14	14	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
15	15	15	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
16	16	16	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
17	17	17	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
18	18	18	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
19	19	19	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
20	20	20	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
21	21	21	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
22	22	22	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
23	23	23	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100
24	24	24	Male	Labourer	Married	Hindu	Illiterate	100	100	100	100	100



Serial No.	Cole	Age	Colour of eyes	Colour of hair	Colour of skin	Measure of head	Measure of head from tip of head	Measure of index	Per cent of circumference of head	Height of nose	Front of nose	Nose index	Biogonometric breadth	Stature	District	Observations
27	Brahman	2	2	Black	19	17.6	14.1	75.75	20.7	5.1	3.4	65.7	123	180.1	Am. Nagah	Darwin's tubercle, high cheek-bones.
28	"	1	1	.	21	17.4	14.0	75.75	21.5	5.7	3.3	50.0	124	176.6	Duburi	Good pilose system.
29	"	4	4	Black and wavy	16	17.7	13.7	72.72	22.7	5.4	3.3	55.0	127	173.3	Chitragach	Slight high cheek-bones.
30	"	2	2	Black	22	17.7	14.7	81.81	22.6	5.5	3.0	55.0	138	175.3	Dumony	Good pilose system.
31	"	2	2	Black and turned gray	14	16.3	13.5	80.33	23.4	5.3	3.0	50.0	125	173.8	Jorhat	Do
32	"	4	4	Black and curly	14	16.0	11.8	83.33	22.0	5.2	3.2	50.0	140	175.7	Tetpur	Darwin's tubercle.
33	"	3	3	Black and curly	26	19.2	12.4	85.94	24.9	6.5	4.0	50.0	139	174.4	Kamrup	
34	"	3	3	Black	18	16.7	15.2	76.94	23.4	5.8	3.5	66.66	140	175.5	Sibsagar	Coarser pilose system.



41	"	Anantnath Sarda	3	Black and rooster	16	160	144	2339	529	56	14	600	138	1239	Kamrup	Great points system
42	"	Mohandastan Sarda	3	Black and rooster	13	156	143	2304	532	54	4	800	132	1276	"	"
43	"	Kerwar Sarda	4	Black and rooster	13	196	165	2308	525	51	57	800	133	1263	"	Light high cheek bones, dread corners
44	"	Kachadra- nath Sarda	3	Black and rooster	20	187	147	2304	528	52	12	600	132	1239	Qashgar	Poor points system
45	Abom	Sarda Sarda	3	Black and rooster	12	187	147	2304	528	52	12	600	132	1239	Singapur	High back bones right apexes
46	"	Sarda Sarda	1	"	16	187	147	2304	528	52	12	600	132	1239	"	Harmonia before high cheek bones
47	Koch	Sarda Sarda	3	Black and rooster	12	154	143	2304	528	52	12	600	132	1239	Mangalore	Dread to cheek bones
48	"	Vataram	3	"	20	183	142	2303	524	52	12	600	132	1239	Kamrup	High back bones and points of cheek
49	"	Chaudaram	3	Black and rooster	20	179	141	2307	532	52	12	600	132	1239	Amalgam	Points of cheek
50	"	Duenam	4	Black and rooster	26	189	152	2302	520	48	12	700	119	1248	"	"

[illegible]

60	"	Thangara	2	31	18.5	13.6	17.77	24.0	6.5	2.0	5.00	12.0	18.7	Chickens	Detention later in 18 per From Dont list for grating at 18.0
67	"	Kumarin	3	25	18.0	15.8	17.17	24.0	2.3	2.0	5.00	12.0	18.7	Chickens	Chick to 18.0 at a return 18.0
68	"	Dayaram	4	27	18.4	14.2	16.04	24.0	1.0	2.0	5.00	12.0	18.7	Chickens	Chick to 18.0 at a return 18.0
69	"	Cheng	2	27	18.0	15.8	17.17	24.0	2.3	2.0	5.00	12.0	18.7	Chickens	Chick to 18.0 at a return 18.0
70	"	Jayaram	3	26	18.0	14.2	16.04	24.0	1.0	2.0	5.00	12.0	18.7	Chickens	Chick to 18.0 at a return 18.0
71	"	Chengaram	3	26	18.0	14.2	16.04	24.0	1.0	2.0	5.00	12.0	18.7	Chickens	Chick to 18.0 at a return 18.0
72	"	Manigamp	3	26	18.0	14.2	16.04	24.0	1.0	2.0	5.00	12.0	18.7	Chickens	Chick to 18.0 at a return 18.0
73	"	Manik	4	27	18.0	14.2	16.04	24.0	1.0	2.0	5.00	12.0	18.7	Chickens	Chick to 18.0 at a return 18.0
74	"	Dayaram	1	27	18.0	14.2	16.04	24.0	1.0	2.0	5.00	12.0	18.7	Chickens	Chick to 18.0 at a return 18.0





No.	Range	Age	Sex	Length	Wing	Tail	Culmen	Gape	Maxilla	Min. length	Weight	Notes
1	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
2	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
3	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
4	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
5	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
6	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
7	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
8	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
9	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
10	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
11	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
12	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
13	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
14	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
15	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
16	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
17	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
18	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
19	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
20	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
21	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
22	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
23	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
24	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
25	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
26	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
27	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
28	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
29	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
30	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
31	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
32	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1
33	1-2	13.4	17.7	5.1	5	3.1	1.4	1.1	1.1	1.1	1.1	1.1

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## INDICES TABLE

	M Average	$\frac{1}{2}$ of M (Period of study etc.)	N Standard deviation	$\frac{1}{2}$ of N Factor of Standard deviation	V Variation (Coefficient)	$\frac{1}{2}$ of V
1. Coefficient of 10 persons	50.0	+ 2461	4.118	$\pm 1.796$	5.1475	$\pm 25.57$
2. Mean Index of 10 persons	67.65	$\pm 7009$	11.06	$\pm 4.430$	16.34	$\pm 81.67$
3. Coefficient of 10 persons	50.0	$\pm 2461$	4.118	$\pm 1.796$	5.1475	$\pm 25.57$
4. Mean Index of 10 persons	67.65	$\pm 7009$	11.06	$\pm 4.430$	16.34	$\pm 81.67$
5. Coefficient of 10 persons	50.0	$\pm 2461$	4.118	$\pm 1.796$	5.1475	$\pm 25.57$
6. Mean Index of 10 persons	67.65	$\pm 7009$	11.06	$\pm 4.430$	16.34	$\pm 81.67$



## Errata

On p. 20 *insert* at the end of Indices table

N.B. The correlations between (1) Cephalic and Nasal Index (2) Cephalic Index and Stature give the following results

Correlation coefficient		Probable Error
(a)		(P. E.)
(1) 0.406	±	0.1408
(2) 0.351	±	0.01

The results show that there is no significant correlation between Cephalic and Nasal Index and there is positive correlation between Cephalic Index and Stature.

# HINDU ANTHROPOLOGY

By

JOGENDRACHANDRA GHOSH

Anthropology is one of the Modern progressive Sciences. Anthropometry and Ethnology are the two important branches of this Science. We shall here give some facts to show that the Hindus had their Anthropometry and Ethnology from a very early period.

## (1) Anthropometry.

Hindus made elaborate measurements of the different parts of the human body for purposes of Ayurveda (Medical Science), Astrology, Painting, Iconography, Dancing and Sculpture. The earliest record of these measurements is found in the *Susruta-Samhita*, one of the earliest medical works of the Hindus, now extant<sup>1</sup>. It lays down that an intelligent physician should know the exact measurements of the different limbs and members of the body for the better ascertainment of the duration of life of a patient before he takes up the case for treatment. The unit of measurement was the breadth of one's own middle finger (*angula*). As the organism of a male at twenty-five and of a female at sixteen years of age attains full development, their measurements have been taken as the standard. The *Samhita* has altogether given 64 measurements, as shown in the statement attached. More measurements are found in later works. Men having these measurements were expected to live the longest. Those having shorter measurements were considered to live less.

*Statement showing the measurements of the different parts of the human body in terms of one's own finger*

1.	Length of great toe ( <i>pada angustha</i> )	2 angula.
2.	Do. second toe ( <i>pradefanti</i> )	2 ..

<sup>1</sup> We are indebted to Dr. Pan Kanan Mitra for bringing this to our notice, see *Science and Culture*, Vol. I, No. 1, June 1935, pp. 23-5.

1.	Length of middle toe ( <i>mādhyama</i> )	11	angula
4.	Do. fourth do. ( <i>anāmika</i> )	1	"
5.	Do. fifth do. ( <i>kaniṣṭha</i> )	2	"
6.	Do. fore-sole ( <i>prapada</i> )	4	"
7.	Breadth do. do	5	"
8.	Length of sole ( <i>prapaṭ</i> <del><i>prapada</i></del> )	4	"
9.	Breadth of do. do	5	"
10.	Length of heel ( <i>parṇa</i> )	5	"
11.	Breadth of do	4	"
12.	Length of foot ( <i>pāda</i> )	14	"
13.	Girth of do. ( <i>pādagaṇḍha</i> )	14	"
14.	Circumference of middle of thigh ( <i>pañḍra</i> )	14	"
15.	Do do knee joint ( <i>śrṅgā</i> )	11	"
16.	Length of leg bet ankle and knee joint	18	"
17.	Do do do wrist joint and do	12	"
18.	Do. of entire leg	30	"
19.	Do of thigh-length bet heel and knee joint		
20.	Do. of scrotum ( <i>śrṅga</i> )	2	"
21.	Do. of chin ( <i>śrṅga</i> )	2	"
22.	Do. of exterior line of nostrils ( <i>nāsikā</i> )	2	"
23.	Do. of tooth ( <i>daṇḍā</i> )	3	"
24.	Do. of the roots of ear ( <i>karnamūla</i> )	2	"
25.	Do. of space bet. eyes	2	"
26.	Do. of non-erected penis ( <i>śukra</i> )	4	"
27.	Do. of cavity of mouth ( <i>śāntāntara</i> )	4	"
28.	Do. of nose ( <i>nāsa</i> )	4	"
29.	Do. of neck ( <i>grīva</i> )	4	"
30.	Do. of ear ( <i>karna</i> )	4	"
31.	Do. of forehead ( <i>śīrṣa</i> )	4	"
32.	Do. of space bet pupils ( <i>śrīṅgāntara</i> )	4	"
33.	Do. of vaginal anal ( <i>śhagāntara</i> )	12	"
34.	Do. of space bet pelvis and umbilicus ( <i>śhagāntara</i> )	12	"
35.	Do. of space bet chest and throat	12	"
36.	Do. of space bet tips of nipples ( <i>śhagāntara</i> )	12	"
37.	Do. of entire face ( <i>śhagāntara</i> )	12	"
38.	Girth ( <i>śhagāntara</i> ) of wrist ( <i>śhagāntara</i> )	12	"
39.	Do. do. of forearm ( <i>śhagāntara</i> )	12	"
40.	Do. round the knee joint ( <i>śhagāntara</i> )	16	"

41	Length bet. wrist and elbow ( <i>karparā</i> )	16 angula	
42	Length of arm ( <i>bhujā</i> ) bet. elbow and tip of middle finger	24	"
43	Do. of the entire arm ( <i>bhujā</i> )	34	"
44	Girth round thighs ( <i>urū</i> )	12	"
45	Breadth of palm ( <i>hastā</i> ) of hand	5	"
46	Length of space bet. bottom of hand and of thumb ( <i>angusthamaṇḍa</i> ) to the root of the index finger	5	"
47	From root of eye to the angle of eye ( <i>paṇḍita</i> )	4	"
48	Length of middle finger	5	"
49	Do. of index do.	4½	"
50	Do. of ring do.	4½	"
51	Do. of thumb	3½	"
52	Do. of little finger	3½	"
53	Do. of breadth of tooth ( <i>amūḥa</i> ) = 4	4	"
54	Girth round neck ( <i>grīva</i> )	20	"
55	Curvature of nostrils ( <i>naṣṭikā</i> ) = 11	11	"
56	Region of eye ( <i>akṣa</i> ) = 1 of the area of corner ( <i>nyāṇa</i> ).		
57	Do. of pupil ( <i>akṣa</i> ) = 1 of do.		
58	Arch from hairy extremity ( <i>śiṣṭā</i> ) of the temple to the middle of back of head	11	"
59	Space bet. middle of back of head to the frontal point of hair on neck	10	"
60	Girth of neck from back of ear to back of ear	14	"
61	Length of pelvic region of woman ( <i>urū</i> ) measured from below the anterior side of thigh joints	12	"
62	Breadth of chest ( <i>śiṣṭā</i> ) of a male	17	"
63	Breadth of thigh ( <i>urū</i> ) of women = waist of a male		
64	Length of a male human body	120	"

(*Suśruta, Sūtra-sthāna. ch. 85*)

Let us now see how old is the *Saṁhitā-Saṁhitā*. The extant *Saṁhitā* is said to be a recension or recension of recensions by Nāgārjuna. The scholars assign him to the second century A.D. but the original *Saṁhitā* is much older than that. The *Varāha* and



Kātyāyana is later than Pāṇini (c. 700-500 B.C.) and earlier than Patañjali (c. 200 B.C.). According to the *Kāthīkīśāstra*, Kātyāyana was the prime minister of Yastarnā, the head of the Nandās and earlier than the Maurya King Candragupta (c. 321 B.C.).<sup>1</sup> Kātyāyana lived in the fourth century B.C. He says—*Sūtrānta prathama smṛitām*, i.e. the work *Sūtrānta* was said by Sūtrata.<sup>2</sup> This shows that the work was well known in the time of Kātyāyana, i.e., in the fourth century B.C. So it can be assigned to the fifth or sixth century B.C. Sūtrata, after giving the measurements, quotes an authoritative passage, in support of his statement, which proves that these measurements used to be taken long before the sixth century B.C.

In connection with the construction of sacrificial altars, the *Atharva-Veda* mentions the number of bones in a human body. This goes to prove that this knowledge of anatomy was so very well-known in the time of the *Atharva-Veda* (c. 1000 B.C.) that it found mention in the religious literature. The bones form the internal structure of the body, while the measurements relate to the surface of the body. We would not be wrong to presume that the study of the surface preceded the study of the internal structure. From all these, we conclude that the anthropometric system of the Hindus was much earlier than the fifth century B.C., the latest date for the *Atharva-Veda*.

Proportionate measurements are given in the *Vasubhāṣa-dhātū*, the *Uśat-Sūtrānta*, the *Sūtrānta*, the *śāstrānta* and the *Tadmaṣṭa*, in connection with leprography, Sculpture, Painting and Dancing. Dr. Stella Kraussch has given these measurements in a tabular form in her translation of the *Vasubhāṣamottara* Part III, pp. 19-24.

### (2) Ethnology.

The ancient Hindus were not without their notion of Ethnology. The first expression of it is found in the *Ājñeda*, where two *Vārṇas*

<sup>1</sup> This we write on the authority of K. L. Bhāgavata, the translator of the *Sūtrānta-Samhitā*, although we have not been able to trace it ourselves. When we find that the *Sūtrānta* is a treatise by a famous Vaidic surgeon and that Jivaka the Court physician of the King Bimbisāra (and a contemporary of B. 321 B.C. 623-543 B.C.), was well-versed in surgical operations, there is no inherent impossibility that a treatise like the *Sūtrānta* existed at that time. In fact, it should be looked upon as a repository of knowledge on the subject from the Vedic age.

coloured) are spoken of. By these two *Varna*s are meant, the light-coloured *Īgya*s (they themselves), and the dark-skinned *Dasya* or the *Dasya* their creatures. This distinction of the *Ārya*s and the non-*Ārya*s has been characterized as *Varna*, because *Varna* or colour first attracts one's eyes. From this, we are not to understand that they failed to notice the other distinguishing features. In the Vedic literature the *Dasya*s have been named not only dark-skinned but also as *beards*, of short stature, coarse featured, untidy and of low speech. This shows that they did not fail to observe all the three elementary principles of Anthropology, viz. the physical characteristics, culture and language. The names such as *Yakṣa*, *Rikṣa*, *Gandharva*, *Kinnara*, etc. also speak of their ethnological division.

With the social development there was division of labour. The difference of profession brought about difference in colours. The priestly class or the *Brahmins* retained their original light colour. The fighting class or the *Kṣatriyas* for preponderance of blood became red. The cultivating class or the *Vaśyas* by their work in the sun became yellow. So among the *Īgya*s themselves there sprang up three *Varna*s which ultimately came to reign supreme.

As time went on people of various other colours than the four principal colours of white, red, yellow and dark, and different other professions sprang up. These were called *Saṁskṛta* *Varna* or mixed colours. These intermediate colours gave rise to different castes. They probably had nothing to do with the intermixture of castes to which their origin is attributed. For example, when it is said that a *śaṭṭha* is born of a *Bṛh* (Brahma) mother and a *Sadra* (father), it probably originally meant that the colour and other characteristics of a *śaṭṭha* was a mixture of a *Brahma* (white) and a *Sadra* (black) more akin to the latter.

Further developments of these ethnological divisions are found in the *Bṛhat-Saṁhita*, where we notice that the anthropometrical measurements have been utilized for the purpose. In Chapter 34 named *Parāṁśikṣa*, Varāha-miśra, for purposes of Astrology divides mankind according to *manasa* (measurement), *manu* (weight), *gat* (gait), *śarīra* (condition of bodily parts), *śarīra* (substance of the body consisting of fat, marrow, skin, bone, semen, blood and flesh), *Varna* (colour), *śruti* (condition of speech—tongue, teeth, eyes and nose), *śara* (voice), *prakṛti* and *akṛti* (character), *śūla* (configuration of

the face), *kyōka* (cheek) dealing with the *kyōka* of umbilical cord, voice, character, breast (*unaka* forehead, mouth, best *kyōka*), armpit, nails, nose face back of the neck pen - back, neck length, eye-carrier foot palm of hand palate lips, tongue, teeth phalanges, hair, skin chin eyes arm and the space between the breasts and *unaka*, which deals with the metre of touch, skin nose, hair of the body and hair.

Up to end of *unaka*, Varadacharya says that an adult male at the age of 25 and a adult female at 18 or when they have attained to the fourth part of their average longevity are entitled to *mona* (weight) and *unaka* measurements. According to the *Varadacharya*, we have seen above, the measurements of females at sixteen should be taken.

Again under head *unaka*, Varadacharya has divided into three classes, *kyōka*, *unaka* (dent), *unaka* (tooth) and *unaka* (worm), according as they are 18, 20 and 21 *unaka* in terms of their own longevity. These measurements, no doubt, refer to their height or *vyāyama* i.e., the length of extended arm span.

At the end of the chapter, the author says that he compiled it by consulting the views of the *raja* *manu* and by abridgement. Keri says that Varadacharya largely borrowed from Garga. He quoted Garga fifteen times in his *Beṇḍi-Samhitā*. Garga Samhitā has a separate chapter called *Nirāśāstra*. So Garga was probably one of the sages consulted. Keri assigns Garga Samhitā approximately to 50 B. C. (Keri's Introduction to the *Beṇḍi-Samhitā*, pp. 42, 43 and 40).

In Chapter 10 on *Pañca-Mahaputrasa-dharma* Varadacharya divides the *Mahaputras* in the category into five classes according to their *vyāyama*. These are - *Kurpa*, 95 *vyāyama*, *Samita*, 99 *vyāyama*, *Manḍakā*, 101 *vyāyama*, *Pañḍakā*, 103 *vyāyama* and *Mandakā*, 105 *vyāyama*, in measure of their own *vyāyama*. The height is equal to *Vyāyama*. The king's belong to these categories. Their subordinates are called *Samikṛta-purusa*. They are respectively, *Kurpa*, *Samita*, *Manḍakā*, *Pañḍakā* and *Jaghanya*.

Many more particulars of the *Mahaputras* are given in the *Varadacharya*. It not only gives the measurements of the

'*Types of India*,' but there is a different part of each, with descriptions of their customs, hair, etc. It also divides their womenfolk into five types and gives their distinguishing features. The work furnishes many interesting details of the different countries of India, as well as of Ceylon, Burma, Siam, etc.

The very interesting fact worthy of notice, in this connection, is that two of these five type names are also the names of two tribes of ancient India. They are *Blaxia* and *Mayava*. *Mayava* and *Blaxia* are also the names of countries. *Blaxia* was a type of temple in Orissa. *Mayava* and *Blaxia* are the sources

We have seen above that the Haida anthropometric measurements are no later than the *Athabaskan*. The several sources, namely Vintzela, *Archeology*, *Leveillé*, *Sagittaire*, *Planting* and *Dancing*, which utilized these measurements do not seem to be later than that date.

Although we are fully conscious of our incompetence to do well on this subject, our object in writing this paper is to draw the attention of the Anthropologists. We are highly gratified if some of them will make use of the material so far as here and there in Sanskrit works, to write a treatise on the subject.

1. If  $\alpha$  are somewhat different from those in the literature. Thus are  $H_{10}$ ,  $H_{11}$ ,  $H_{12}$ ,  $H_{13}$ ,  $H_{14}$ ,  $H_{15}$ ,  $H_{16}$ ,  $H_{17}$ ,  $H_{18}$ ,  $H_{19}$ ,  $H_{20}$ ,  $H_{21}$ ,  $H_{22}$ ,  $H_{23}$ ,  $H_{24}$ ,  $H_{25}$ ,  $H_{26}$ ,  $H_{27}$ ,  $H_{28}$ ,  $H_{29}$ ,  $H_{30}$ ,  $H_{31}$ ,  $H_{32}$ ,  $H_{33}$ ,  $H_{34}$ ,  $H_{35}$ ,  $H_{36}$ ,  $H_{37}$ ,  $H_{38}$ ,  $H_{39}$ ,  $H_{40}$ ,  $H_{41}$ ,  $H_{42}$ ,  $H_{43}$ ,  $H_{44}$ ,  $H_{45}$ ,  $H_{46}$ ,  $H_{47}$ ,  $H_{48}$ ,  $H_{49}$ ,  $H_{50}$ ,  $H_{51}$ ,  $H_{52}$ ,  $H_{53}$ ,  $H_{54}$ ,  $H_{55}$ ,  $H_{56}$ ,  $H_{57}$ ,  $H_{58}$ ,  $H_{59}$ ,  $H_{60}$ ,  $H_{61}$ ,  $H_{62}$ ,  $H_{63}$ ,  $H_{64}$ ,  $H_{65}$ ,  $H_{66}$ ,  $H_{67}$ ,  $H_{68}$ ,  $H_{69}$ ,  $H_{70}$ ,  $H_{71}$ ,  $H_{72}$ ,  $H_{73}$ ,  $H_{74}$ ,  $H_{75}$ ,  $H_{76}$ ,  $H_{77}$ ,  $H_{78}$ ,  $H_{79}$ ,  $H_{80}$ ,  $H_{81}$ ,  $H_{82}$ ,  $H_{83}$ ,  $H_{84}$ ,  $H_{85}$ ,  $H_{86}$ ,  $H_{87}$ ,  $H_{88}$ ,  $H_{89}$ ,  $H_{90}$ ,  $H_{91}$ ,  $H_{92}$ ,  $H_{93}$ ,  $H_{94}$ ,  $H_{95}$ ,  $H_{96}$ ,  $H_{97}$ ,  $H_{98}$ ,  $H_{99}$ ,  $H_{100}$ ,  $H_{101}$ ,  $H_{102}$ ,  $H_{103}$ ,  $H_{104}$ ,  $H_{105}$ ,  $H_{106}$ ,  $H_{107}$ ,  $H_{108}$ ,  $H_{109}$ ,  $H_{110}$ ,  $H_{111}$ ,  $H_{112}$ ,  $H_{113}$ ,  $H_{114}$ ,  $H_{115}$ ,  $H_{116}$ ,  $H_{117}$ ,  $H_{118}$ ,  $H_{119}$ ,  $H_{120}$ ,  $H_{121}$ ,  $H_{122}$ ,  $H_{123}$ ,  $H_{124}$ ,  $H_{125}$ ,  $H_{126}$ ,  $H_{127}$ ,  $H_{128}$ ,  $H_{129}$ ,  $H_{130}$ ,  $H_{131}$ ,  $H_{132}$ ,  $H_{133}$ ,  $H_{134}$ ,  $H_{135}$ ,  $H_{136}$ ,  $H_{137}$ ,  $H_{138}$ ,  $H_{139}$ ,  $H_{140}$ ,  $H_{141}$ ,  $H_{142}$ ,  $H_{143}$ ,  $H_{144}$ ,  $H_{145}$ ,  $H_{146}$ ,  $H_{147}$ ,  $H_{148}$ ,  $H_{149}$ ,  $H_{150}$ ,  $H_{151}$ ,  $H_{152}$ ,  $H_{153}$ ,  $H_{154}$ ,  $H_{155}$ ,  $H_{156}$ ,  $H_{157}$ ,  $H_{158}$ ,  $H_{159}$ ,  $H_{160}$ ,  $H_{161}$ ,  $H_{162}$ ,  $H_{163}$ ,  $H_{164}$ ,  $H_{165}$ ,  $H_{166}$ ,  $H_{167}$ ,  $H_{168}$ ,  $H_{169}$ ,  $H_{170}$ ,  $H_{171}$ ,  $H_{172}$ ,  $H_{173}$ ,  $H_{174}$ ,  $H_{175}$ ,  $H_{176}$ ,  $H_{177}$ ,  $H_{178}$ ,  $H_{179}$ ,  $H_{180}$ ,  $H_{181}$ ,  $H_{182}$ ,  $H_{183}$ ,  $H_{184}$ ,  $H_{185}$ ,  $H_{186}$ ,  $H_{187}$ ,  $H_{188}$ ,  $H_{189}$ ,  $H_{190}$ ,  $H_{191}$ ,  $H_{192}$ ,  $H_{193}$ ,  $H_{194}$ ,  $H_{195}$ ,  $H_{196}$ ,  $H_{197}$ ,  $H_{198}$ ,  $H_{199}$ ,  $H_{200}$ ,  $H_{201}$ ,  $H_{202}$ ,  $H_{203}$ ,  $H_{204}$ ,  $H_{205}$ ,  $H_{206}$ ,  $H_{207}$ ,  $H_{208}$ ,  $H_{209}$ ,  $H_{210}$ ,  $H_{211}$ ,  $H_{212}$ ,  $H_{213}$ ,  $H_{214}$ ,  $H_{215}$ ,  $H_{216}$ ,  $H_{217}$ ,  $H_{218}$ ,  $H_{219}$ ,  $H_{220}$ ,  $H_{221}$ ,  $H_{222}$ ,  $H_{223}$ ,  $H_{224}$ ,  $H_{225}$ ,  $H_{226}$ ,  $H_{227}$ ,  $H_{228}$ ,  $H_{229}$ ,  $H_{230}$ ,  $H_{231}$ ,  $H_{232}$ ,  $H_{233}$ ,  $H_{234}$ ,  $H_{235}$ ,  $H_{236}$ ,  $H_{237}$ ,  $H_{238}$ ,  $H_{239}$ ,  $H_{240}$ ,  $H_{241}$ ,  $H_{242}$ ,  $H_{243}$ ,  $H_{244}$ ,  $H_{245}$ ,  $H_{246}$ ,  $H_{247}$ ,  $H_{248}$ ,  $H_{249}$ ,  $H_{250}$ ,  $H_{251}$ ,  $H_{252}$ ,  $H_{253}$ ,  $H_{254}$ ,  $H_{255}$ ,  $H_{256}$ ,  $H_{257}$ ,  $H_{258}$ ,  $H_{259}$ ,  $H_{260}$ ,  $H_{261}$ ,  $H_{262}$ ,  $H_{263}$ ,  $H_{264}$ ,  $H_{265}$ ,  $H_{266}$ ,  $H_{267}$ ,  $H_{268}$ ,  $H_{269}$ ,  $H_{270}$ ,  $H_{271}$ ,  $H_{272}$ ,  $H_{273}$ ,  $H_{274}$ ,  $H_{275}$ ,  $H_{276}$ ,  $H_{277}$ ,  $H_{278}$ ,  $H_{279}$ ,  $H_{280}$ ,  $H_{281}$ ,  $H_{282}$ ,  $H_{283}$ ,  $H_{284}$ ,  $H_{285}$ ,  $H_{286}$ ,  $H_{287}$ ,  $H_{288}$ ,  $H_{289}$ ,  $H_{290}$ ,  $H_{291}$ ,  $H_{292}$ ,  $H_{293}$ ,  $H_{294}$ ,  $H_{295}$ ,  $H_{296}$ ,  $H_{297}$ ,  $H_{298}$ ,  $H_{299}$ ,  $H_{300}$ ,  $H_{301}$ ,  $H_{302}$ ,  $H_{303}$ ,  $H_{304}$ ,  $H_{305}$ ,  $H_{306}$ ,  $H_{307}$ ,  $H_{308}$ ,  $H_{309}$ ,  $H_{310}$ ,  $H_{311}$ ,  $H_{312}$ ,  $H_{313}$ ,  $H_{314}$ ,  $H_{315}$ ,  $H_{316}$ ,  $H_{317}$ ,  $H_{318}$ ,  $H_{319}$ ,  $H_{320}$ ,  $H_{321}$ ,  $H_{322}$ ,  $H_{323}$ ,  $H_{324}$ ,  $H_{325}$ ,  $H_{326}$ ,  $H_{327}$ ,  $H_{328}$ ,  $H_{329}$ ,  $H_{330}$ ,  $H_{331}$ ,  $H_{332}$ ,  $H_{333}$ ,  $H_{334}$ ,  $H_{335}$ ,  $H_{336}$ ,  $H_{337}$ ,  $H_{338}$ ,  $H_{339}$ ,  $H_{340}$ ,  $H_{341}$ ,  $H_{342}$ ,  $H_{343}$ ,  $H_{344}$ ,  $H_{345}$ ,  $H_{346}$ ,  $H_{347}$ ,  $H_{348}$ ,  $H_{349}$ ,  $H_{350}$ ,  $H_{351}$ ,  $H_{352}$ ,  $H_{353}$ ,  $H_{354}$ ,  $H_{355}$ ,  $H_{356}$ ,  $H_{357}$ ,  $H_{358}$ ,  $H_{359}$ ,  $H_{360}$ ,  $H_{361}$ ,  $H_{362}$ ,  $H_{363}$ ,  $H_{364}$ ,  $H_{365}$ ,  $H_{366}$ ,  $H_{367}$ ,  $H_{368}$ ,  $H_{369}$ ,  $H_{370}$ ,  $H_{371}$ ,  $H_{372}$ ,  $H_{373}$ ,  $H_{374}$ ,  $H_{375}$ ,  $H_{376}$ ,  $H_{377}$ ,  $H_{378}$ ,  $H_{379}$ ,  $H_{380}$ ,  $H_{381}$ ,  $H_{382}$ ,  $H_{383}$ ,  $H_{384}$ ,  $H_{385}$ ,  $H_{386}$ ,  $H_{387}$ ,  $H_{388}$ ,  $H_{389}$ ,  $H_{390}$ ,  $H_{391}$ ,  $H_{392}$ ,  $H_{393}$ ,  $H_{394}$ ,  $H_{395}$ ,  $H_{396}$ ,  $H_{397}$ ,  $H_{398}$ ,  $H_{399}$ ,  $H_{400}$ ,  $H_{401}$ ,  $H_{402}$ ,  $H_{403}$ ,  $H_{404}$ ,  $H_{405}$ ,  $H_{406}$ ,  $H_{407}$ ,  $H_{408}$ ,  $H_{409}$ ,  $H_{410}$ ,  $H_{411}$ ,  $H_{412}$ ,  $H_{413}$ ,  $H_{414}$ ,  $H_{415}$ ,  $H_{416}$ ,  $H_{417}$ ,  $H_{418}$ ,  $H_{419}$ ,  $H_{420}$ ,  $H_{421}$ ,  $H_{422}$ ,  $H_{423}$ ,  $H_{424}$ ,  $H_{425}$ ,  $H$



## SOME PRIMITIVE TOTEM CONCEPTS AS GUARDIAN ANGELS WITH SPECIAL RE- REFERENCE TO THE BEAR AS A GUARDIAN SPIRIT

*(An analytic study of the primitive attitude towards totem-guardian  
angels heretofore unmentioned modes of thought)*

BY

S. SIRCAR

Whatever be the beginnings of earth according to the Laplacean theory or the modern platonic ideal repetition of Chamberlain and Merton and whatever be its age in relative element in 'half period computation' and its succession in geological epochs there is no denying that after a long long lifeless period it stepped into a life-bearing condition a phenomenon new to her a wonder experience in her life career not so long dreamt of in the offspring of a successful career in the high ecstasy of the rotatory circuits of a changing traverse. It is then that the plants developed and still later the marvels of animal life.

The first dawn of human life, in many senses the greatest miracle of the terrestrial career broke amidst widely distributed luxuriantly grown plant life and lovely, pious and a healthy sweet singing noisy world of animal life. The awe-struck wonder-absorbed human life awoke with its biological urge but in a state of mental bewilderment as to how best it can get on the same footing with them. The peculiar helplessness of human life in solving the food problem and the free natural, easy growth and development of plants and animals stood out with a strange contrast. Here were the plants and trees growing and developing with a luxuriant foliage neglecting

the vicissitudes of all weathers and persistently spreading forth in the midst of obstacles—and the animals ranged fire and knew exactly what fruits were sweet and acerb, where the honey was to be had and how it was to be gathered without the sting's being in the least effective or what clean water was to be drunk without the danger of being poisoned—how to convert the game for one's daily food—were they not the first objects of use and imitation of man in his worried quest in search of food and shelter?

True man found himself inferior to plants and animals in satisfying his biological needs such as hunger and thirst or weathering the inclemencies of season in winter protection. So he came to accept them merely as superior and tried to get all his wants met and frustrated through them. The sense of hunger and discomfort led man to believe that when plants grew so well fed and grew so luxuriantly they will also get the power of satisfying their hunger and grow plump and hearty if they could eat the flesh and blood of the animals. It was the nature of the belief of the primitive mind and they looked at the facts in their most casual aspects. The story of the goose giving golden eggs in Aesop's Fables reveals the characteristic attitude of a casual or primitive mentality—similar to the alchemist type the owner tried the means of getting all the eggs at once by ripping the goose open. Thus this also might have been the psychological beginning of the elaborate rituals of the eating of the gods.

Similarly the superior and supernatural power ascribed to animals can be seen in many cases. The belief that animals know things that we know not and see things that we see not is scattered all over the earth. When the primitive man saw countless instances of birds forewarning of the approach of storm—animals saved from the approach of flood by timely escape whereas man was perished—then there grew the natural conviction that animals had foreknowledge. The prophetic power of animals has an important bearing on the subject of divination. Animals were the passive instruments or medium of superior power which was believed to be communicable to man through their flesh and especially through their blood. So it was naturally thought that the animals were the possessors of all human traits with the addition of some other particular traits in each special





in the solution of such problems as we have seen led them to pay homage to plant and animal life as protectors and life-giver and sustainer. This as a symbol represented a development into Totem. Each band or family group in a tribe begins to owe its allegiance to some totem or other. The collective function of each totem is the subject-matter of totemism. The totem of each group becomes the repository of the power that gives or has given in the past such protection against the simple but insistent demands of life. The simple belief in the totem maintained and helped their life-problem. But afterwards were induced to get more satisfaction in believing in some different object either animate or inanimate other than the group totem. This is the individual totem. The intermediary of these two totems is the ex-totem. The fulfilment of sexual urge or its gratification is a necessary requisite in the continuance of existence of life.

If we review some of the earlier viewpoints of totemism we might go on through the encyclopaedic work of Frazer<sup>2</sup> and find out how McLennan, Robertson and Leys saw that Totemism had indicated the religious and social history of mankind<sup>3</sup> or how 'it lay at the root of Semitic religion' or 'was a rude scheme of exerts and expiation wherein were the germs out of which not only all religion but all material progress have been evolved'. Frazer himself disposed to start with the Australians as an example of the most primitive culture as Wundt built his system on the assumption of the Vedas being the most primitive or as Leys emphasises the case of the Andamanese or the Tierra del Fuegians in which he is fortunate to be in the same position as the great Durkheim—quotes the tradition of these tribes who suppose that in certain far off time to which they give the name of Aicetima, then ancestors roamed about in bands, each band consisting of members of the same totem group.

The real sense and the underlying belief or the fundamental notion of totemism was attempted to be explained by Durkheim. Frazer's definition of totemism tends to show the subsequent developments of animism, naturism, shamanism and religion. According to Frazer totem is a class of material objects which a savage regards with superstitious respect, believing that there exists between him and every member of the class an intimate and altogether special relation.<sup>4</sup>

Durkheim's belief of totemism being more primitive than animism and naturism is against the Tybrian attitude which takes totemism as a mere form of ancestral cult and a part of animal worship, is based on a far deeper analysis of the fundamentals. Durkheim has elaborately explained by a searching analysis why totemism is not a mere system of totemism, just a phase or a part of animism or of ancestral cult and ancestral worship. He is of opinion that religion develops from it.

The present day attitude in religious belief and primitive belief is the same so far as the function is concerned. What religion does for the masses today the totem of the primitive world did for the savage and served humanity as well. The underlying spirit in the belief of any form of religious emblem is the same as in the case of the totemic emblem. The cross or charan, the mosque or temple, of today is exactly the same institution as the totem symbol and marks out the prohibitory area with regard to each totem.

The gradual steps leading from totem to religion may be thus. In every primitive band some individual gets the uppermost position. He becomes the director of the band. The totem has a direct communion with him. He directs the band and selects in many cases what would be the totem of any individual. The band as a whole possesses this belief toward the individual. Afterward he becomes the shaman. From shamanism and the totemic concept underlying it originates religious belief, as in totemism some conception of impersonal universal force is involved, i.e., totemism itself is a religion. The primitive mind rests satisfied with it. Totemism is the religion not of such and such animals or race or images, but an impersonal and impersonal force forced in each of these beings but not to be confounded with any of them.<sup>6</sup>

"The behaviour of primitive men towards their totem animal or the whole class of animal of the particular totem group has a remarkable bearing of the acceptance of the group by the people.

"The bear is treated as an honored guest who must not be offended."

Among Siberian tribes bear-festival is performed throughout the country.

"It is the common duty of clansmen to feed the bear, and to take



part in bear hunting when the bear either tame or wild is killed. This festival has both a religious and social significance.

The Jiskar is very much afraid of heat. Yet he is the first to admit that the bear is capable of suffering in the first of fine people men. A woman was once caught shooting a bear and gave him a partridge for each arrow from the tribe. However, it was not her news which was overheard. Another man saw the skin of the men was washed to reward him. He proudly refused the offer, but if, in winter time, they were to see a killed bear with they infuse their souls at its foot as the too. After a season, he joined into the sea. Next winter a bear was killed and they were going to hunt him when these men reached seen what had happened, begged the hunters to wash the skin at the time. This request was their own bear. They had the objects to prepare a feast for him, and when he had refreshed himself he lay down to sleep and the children played around him. Presently he was washed into a little river, after which he went down to the sea, right in, and was never seen again.

In spite of this, the Jiskar has been levelled against Tybrian dreaming usage by the author of Hookham and remembering the people of the world of law and the attempts of rehabilitating the human position in the human horizon. It is worth when examining the value of human in an analysis of primitive life. When we find the early people who as sleep it seems that they are dreaming perhaps of something else and we may consider at the outset that the state of human is within the possible states of experience of primitive man if not of animals as well. In an experimental psychology class in Yale which one of the authors attended there was a class on dream psychology when each one stated his dream experiences, and apart from trying to illustrate the dream as suppressed desires as Freud would have it (which was not a better conclusion in the class) there was an attempt at analysis as to how far dreams were connected with physiological conditions, how far they could be induced, how much they reflected the subconscious mind, how far some expected conditions were penetrating the subconsciousness of an individual concentrated or diminished the external accompanying state. In India the belief of experiences of the individual in the subconscious as carried over from his previous birth is still to be seen in it accepted as part of the dream experiences of at least some who claim to have

transcended the limitations of normal sense-knowledge by practices of concentration of mind. One of the modern Anthropo-philosophers of Bengal Mr. K. C. Sanyal Sanyaljee thus spoke about dreams:

Dreams and thoughts are not heretofore of all significance. One can understand the state of one's mind from the eye to visualised in his dreams. The things which have the greatest part on one's mind in his innermost core float into visual range. The first causes of the future are laid deep in the present. If these ideas come to operate on our *chitta* or consciousness, we come to see future events in our dreams. The thoughts of the day are also visible during the night as dreams. If the sleep is not deep, if at that time any condition of the external world is brought back to the mind in a slight manner we feel that deeply. While falling into a semi-sleep condition even a pillow lying on the body is felt as a heavy load. As in the waking state various thoughts arise in the mind, in a state of sleep also various thoughts may flit through the mind and be visible as dreams. There is a mutual relationship in our ideas. As there is a mutual likeness between a class of ideas they mutually attract each other. Our association of ideas may also be of various types. In man the ideas of his previous births are also laid deep in the dormant state. If the ideas of the present life in by any means the same as the ideas of past life it begins to attract the thoughts of past life. If such a combination happens in a state of dream the conditions of past life are also visible in a state of dream. We may understand and are accustomed to understand many truths with the help of examples or analogies. Thus from many events seen as examples we may come to understand the things which they stand for. It is very hard to enumerate and exhaust all the causes and ways of dreams.

We have seen that primitive man on account of his helplessness takes to envy the free life of plants and animals and to wonder at their simple solution of life problems which they think are due to superior powers and foreknowledge of natural phenomena and he comes to think of them as possessed of secret powers of speech like man, and gradually there is development of mediastinic powers in some who seem to be the spokesmen of these supposedly superior Type-Animal or Type-Plants and the ascribing of ancestorship becomes prominent in ideas where the glories of days of superior ancestors are predominant concepts or they become guardian spirits where the struggle for

existence has made men more dependent on his animal fellows and where these are in the background, a mere carrying on of older ideas is just maintained in the system of totems. Now in an area where the Eskimo lives in company with his gentlemanly bear associates who are the only dominating living phenomena of the area, it is but quite natural for him after such an experience of warm friendly greetings from a bear as narrated before that falling down to sleep he will dream that a great bear is his guardian genius and is saving him from all other animals outside and is guarding him from other animals that have come to attack him. Now as soon as he comes out of his enclosure he dreams that the bear hugs him fondly and lies down and begins to sleep in great contentment and he could feel that he was the lap of his guardian genius who might have been his ancestor as well as his totem.

We can now go back to Frazer who in his *Belief in Immortality* (Vol. I, pp. 139-41) points out how the savage has faith in the truth of dreams and his faith in 'the reality of dreams has been one of the principal sources of the widespread almost universal belief in the survival of the human soul after death. It explains why ghosts are supposed to appear rather by night than by day, since it is chiefly by night that men sleep and dream dreams. Perhaps it may also account for the association of the stars with the souls of the dead. For if the dead appear to the living mainly in the hours of darkness, it seems not unnatural to imagine that the bright points of light which then bespangle the canopy of heaven are either the souls of the departed or fires kindled by them in their home aloft.' Thus the stars come to be associated with the souls of the dead. As the totem is looked upon as the father angel spirit so it is immortal and lies in a better world in heaven. Thus in time the polar bear comes to correspond with the polar star in the sky. Is it not strange then to find in Hindu Mythology, that the home of the dead is given as in Bhavavilasya, the region of the polar star—development of the same lines of thought as of polar inhabitants like the Eskimos coming gradually to identify the polar star with the bear totem. Thus we perpetuate perhaps the original totemic idea in the name of the stars of the *Great Bear*. In Hindu mythology they are the stars of the seven great ancestral sages to whom offerings are made on the occasion of the annual water-tarpana or offerings to the ancestors. In Sanskrit they are named

*Sapta* (seven) *Rakshasas* and one wonders whether this has not been a variation of *Sapta* (seven) *Rakshas* (beasts). Similarly one likes to get at the connecting links of the idea which makes a bear friend of the epic hero Rama along with monkeys in his march to the south to fight against Ravana. What then is the lost history to be traced behind the bear totem people and their possible migrations from a northern home where alone the bear should have such important functions as a helpmate of man?

### References.

- (1) Comte's *Essays Metaphysical Constructive: The Place of Animals in Human Thought* London, T. Fisher Unwin, 1910, pp. 23-29.
- (2) C. W. Ceram *Introduction to Primitive Anthropology* 1929 p. 14.
- (3) H. and C. Seligman *Incest and Descent*, Journal Roy. Anthrop. Inst.
- (4) C. W. Ceram, *op. cit.*, pp. 209-10.
- (5) Frazer *Totemism and Exogamy*, Vol. I, p. 91.
- (6) *Ibid.*, Vol. I, p. 3.
- (7) Durkheim *Elementary Forms of Religious Life*, pp. 146-234.
- (8) A. C. M. Nicholson *My Life with the Eskimo* pp. 57-58.
- (9) M. A. Comstock *Algonquian Siberia, A Study in Social Anthropology*, pp. 15-16.
- (10) E. M. Cresson, *The Place of Animals in Human Thought*, pp. 68-90.

# JURISTIC ETHNOLOGY OF THE MEITEIS AND THE NAGAS

By

**SARANJIT SINGH, M.A., B.L.**

*Dept. of Anthropology, Calcutta University*

Manipur Sansi Luyith—the golden land of the Meiteis—is a gorgeous valley lying between lat. 25° 50' and 26° 3' north and long. 93° 19' and 94° 30' east is full of undulations and hills forming a marked contrast along with its civilised, organised state, with the surrounding mountain heights teeming with wild tribes who were head-hunters not very long ago. The hills around it practically shut it entirely out of the rest of India and probably this feature as a blessing in disguise has helped to a great extent to preserve some of the peculiar customs and traditions intact even to this very day. The fertility of the soil, the evergreen country with luxuriant vegetation, rivers, and magnificent lakes have made life extremely easy. In an area like this it is all the more interesting to find a halfway house between the Vedic system and the primitive system of Hindu government and judicial machinery. It is perhaps in the days of strong cultural and political organisation in ancient India, that Manipur could keep regular contact with that higher civilisation along 154 miles of dangerous road not very long ago maintained from the encroachments of nature and the inroads of the hunting tribes.

In the country of Manipur itself the people of the valley and those of the hills present many anomalies and divergences. These in relation to each other and in relation to the systems



of India as a whole present again many difficulties in the way of analysing in terms of economic, social and political factors, with necessary exactitude. Further, in such an attempt not only does the size and diversity of India (together with its literature) prohibit a cursory survey of the whole, but its environments, which have been particularly adapted to the diffusion of culture traits, come in as an important factor in the correlation as well as classification. Again among the inhabitants of Manipur we find contradictions in cultural details which are advanced economically and socially at the same time, exhibiting certain features which we have to call backward in relation to their economic and social status.

In this paper no detailed study of the social and judicial life in correlation with economic environment has been made but an attempt has been made to put together certain facts which do not seem to have been well dealt with by previous writer. Whenever new suggestions have been put or old theories questioned the author's authorities generally are writers imbued with the evolutionary standpoint. The people dealt with have scarcely any trace of written codes. Custom and tradition controls the life of the different components of the community. The Meitais have of course a definite organised machinery for the administration of law. Prof. Hodgson in his monograph "The Meitais" has given a fairly good description of the judicial and administrative machinery of the Meitais, but the importance of his work chiefly lies in the fact that a close relation with the Naga and Kuki systems has been assumed everywhere. But a closer analysis of these shows no doubt a territorial principle as a governing factor among the Meitais whereas among the Nagas and Kukis it is the kinship principle.

In the economic classification the Meitais may be placed in the highest grade of agriculturists, who obtain crops from seeds sown broadcast on a large scale. The use of the plough with cattle harnessed to it gives them plenty harvest each year. Crops are

grown by rotation. The study of annual calendar shows the march of seasons and the work imposed in the domain of food pursuits among the people.

Time has elapsed since the clans have divided into family groups called *Yan nals* some of which indicate the occupations which they might have held in the days of yore. The Menter who heads the stratum of clans is associated with herd of cattle and we find the *menter* or priest-doctor as an influential personality until a very recent time. The powers exercised by them on magical and religious line and the punishment by ostracism prevalent among them reminds us of some connection with the tribes of Borneo, Micronesia and Polynesian islands.

The chronicles show how the Menters have united the small states into a big state and how the upper and lower strata of society formed in the meanwhile, gave rise to the great politico-economic system of the Laloop. Here a large number of non-producing persons—the *jabas* or the head of the families or clans—had to serve the rulers as their bodyguards. A graded organisation and officialdom arose to manage this Laloop which also provided the military and labourer class. With the growth of aristocracy the labour for tilling fields began to be commercialised, as it is to a great extent now a days. The detribalised peoples, such as the Lais, were thrown in a lower rank and had to pay taxes to the state, while the others were exempted in consideration of the Laloop.

Although a considerable reorganisation has taken place since the days of Maharaja Garndet Singh owing to the introduction of a standing army as well as owing to the influence of Hinduism and to their connection with the British since the middle of the 19th century which has completely altered the older ideas of landownership, their culture is intact in its main features and may be taken as a representative example of the old Menter civilisation. Principles like the re-cultivation of king's lands, etc., and the constant supervision of the agricultural works

by the institution of "Kure-dau" through its functionaries speak of the long forgotten trend through which the conception of ownership and inherited property might have passed.

The present Meitei system of government is monarchial. There is also a regular form of public justice exercised by the representatives of the king, taking cognisance of tribal or sacred offences such as breaches of tribal law, marriage rules and ceremonial offences. The three courts of Cherip, Panchai and State Durtar administer the unwritten law with a system of regular trials in which orators and oracles are used and award punishments. The government further is characterised by the remarkable manner in which an older clan organisation has been subordinated to the king in whose hand all powers have been centralised. He regulates all marriage laws and decides in matrimonial cases arising out of matrimonial irregularities assisted by a council of Brahmins. He also is their religious authority. The king marries generally a Meitei girl of the Arin sub-tribe.

There are seven *clans* or *vilas* which since the introduction of Hinduism have grafted on to each of them a Brahmmin-Rishigera. Some of them are also connected with flowers or animals which their presiding deity has preferred. These clans have taken each of them Yaminaka (clan names) or family group which despite of the introduction of the *gotras* is still the operative factor which regulates marriage inter-caste. All clans are however exogamous except some Yaminaks among them and descent is reckoned in the father's line. Each individual has two names, a birth name or Christian name and a second or secret name which he takes upon him together with food vilas on the initiation ceremony which entitles him to become a full-fledged member of the Meitei society.

The smallest social unit of the state is an extended family, while for political purposes the unit is the village and the society in the village is founded on common fealty—men obeying the laws of the country formulated by the king in council and each village forms not only a convenient living place of the people

but also an organic part of the whole social structure. The social unit here of course is not to be confused with villages where communities are grouped together generally, owning land in common and dealing as units, i.e. individual property in the ordinary legal sense. So the Meiteis may be said strictly to possess a village organisation and having no village community and on this point also they differ from the neighbouring tribes of Nagas and Kukis.

We are aware of only one sort of association into which a village was divided namely the *singlaks*. These *singlaks*, on the one hand, performed the village *khutani* or co-operative labour and formed a very important organ in the organisation of the *laloop* as has been indicated elsewhere<sup>1</sup> and, on the other, dealt also with state politics. It was linked with the central organisation through 3 officials namely the *Gopal-singlakpa*, *Gopal-bangaba* and *Gopal-hidang*. The other association—the *kerop*—has been of serious trouble for its being so long under-trod as the tiger cuba.<sup>2</sup> The chronicler gives the names of four *keropas* into which the valley was divided under the headship of the *Kerakpa*. *Ker* has always been associated with agriculture and also differs in tone with the same word meaning tiger, which we have the *Keronthou* and the *Ker* slaves to look after royal food-stuff.

Before passing to the social and political organisation of the Meiteis one further feature of their economic life must be noted, which is comparable to that of a large area in Africa. This feature is the scale in which certain kinds of works are carried on. The building of houses in the palace enclosure and of the many principal and subsidiary enclosures surrounding the capital, groups of houses within, involved the co-operation of hundreds of workers who perhaps used to furnish also the building materials and whose task required continuous application of labour for weeks and months at a time. Further the making of

<sup>1</sup> *Calcutta Review*, Sept. 1934.

<sup>2</sup> *Ibid.*, p. 371, Sept. 1934.

roads which connected the different towns and districts in Manipur with the capital and other principal towns was even a more laborious undertaking involving still larger number of working-men who were furnished by all communities. These aspects of industrial enterprise may well be compared to that among the Indians and the peoples of primitive America, Australia and Siberia.

Not very long ago and contemporaneous to the British advent, the country was divided into four Pinnas. Hodson speaks of six Pinnas<sup>1</sup> as well as the records of Manipur credit King Loiyumba with the establishment of six Pinnas. King Khagemba reorganised them on the basis of four, namely — Ahallup meaning the society of elders, Nalrapur the society of youngsters, Khadam and Lapham. The Khadam Pinna is associated with Khabam-gamba clan. Each of these provinces were placed under the rule of a governor who used to live at the capital like the Peruvians, for at least a part of the year. The distinct bodies of *amloep* and *ketung* are described as the body under the Pitha or head. In almost every village there existed regular tribunals whose jurisdiction extended over petty offences. The village co-operated as a whole in religious or social and economic matters, the leadership for these purposes rested in special families and individuals. Is it not possible to compare the curious association of socio-economic and political organisation namely the existence of rich and influential families or leaders with rice culture with the same sort of institutions of the Malaysians?

Another most striking feature of the socio-political economic organisation of the Meiteis was the unique principle of the system of "Lalop"—free and

<sup>1</sup> The 6th and 7th Pinnas are said to be confined as territories of slaves. They are really the divisions of the inferior group, the Phuong-pet, as contrasted with the superior free men, the Meiteis. The management of the Phuong-pet was by the Phuongpet Lalopang and other communal officers for contributing labour for the royal household. Thus Phuongpet—the 6th so-called Pinna, looked after the royal mats, clothes and sared thread while Hloak Phangpam was in charge of royal Hula tobacco, pome and molasses. They were not of course slaves.



compulsory labour due to the state in lieu of the taxes. Every adult male member who could cultivate a "pari" (a measure of land) had to serve the king ten days out of forty with the proper work of the grade to which he belonged. The *patas* or the heads of the families were bound to enlist the proper men in the "Khaulin," the executive machinery of the "Lalooop." The social structure of the village was closed into divisions for the maintenance of the "Lalooop." The first group comprised of the *patas* or the heads of the families and the tribe. They were immune from the dangerous part of labour. They led the family group and attended on the king. The second group formed the most important section of the "Lalooop," having the responsibility of all the works of the Lalooop of that group and as such they had to perform all the heavy duties in and for the "Lalooop" or village. The third group consisted of the "Lalooops" or the militia. The fourth was called "Sangyalor" or the workers on roads and bridges who worked in unison with the second group.

To give this economical system of Maekpur a degree of completeness we have to deal with the Meiteis as forming into two divisions with regard to labour. The first one was called the Meiter, the superior class, and the other the Phoongnai, the inferior class. The Phoongnai was divided by Hodson into "Hobak phangba" and "Patsingba." An account<sup>1</sup> of 1851 mentions "Tenkhol," "Kai" and "Avokpa" in the same group. The "Tenkhol" was associated with horticulture while the latter used to "provide and pound rice for the Royal household." The Avokpas, probably captives of war, were included in the category of slaves for large services to the state in all its works, administrative as well as private. "Both the Phoongnai and Tenkhol," says Hodson, "were originally slaves of the Rajah." The local traditions no doubt class them under a group

<sup>1</sup> Hodson, "The Meiteis," p. 24.

<sup>2</sup> Quoted by Lt. Dunn.

<sup>3</sup> *Ibid.*

inferior to the Meiteis probably because of their mixed origin—from the Meiteis and Indians.

For a thorough management of the *tatup*, the economic-military institution, Meiteis were divided in four "Pannas" or geographical units namely "Ammup," "Naharup," "Khamlam" and "Lupham," the "Phoongnam" was divided into Patsangham and Hidak phoombam. Each of these Pannas had an elaborate list of officers who were also entitled to sit as a judicial body of the state. Further each of these Pannas had two separate departments, one for the service of the king called Sangha and another for the service of the queen called Sangguba. The Phoongnams in the King's service were named "Lemmanais."

Each Panna had villages under it and these villages returned officers who occupied some of the official seats in the Panna. These were never chosen or elected but formed out of the heads of the families who by virtue of their being so, held the sceptres of their groups.

In the partly theocratic organisation of the state there is a remarkable parallelism with the Peruvian system which is much more strong however when we consider the older form of state socialism in Manipur which has now entirely disappeared. We may compare this organised principle of labour with that of Peru which also was based ultimately on agriculture and where, as in the Meitei state, no man was exempt from agricultural labour or from military service except by special privilege. Both in Peru and Manipur weaving and spinning were almost universal though the selected groups of artisans for mining and metallurgy or for stonework were very rare. In Manipur there is a definite set of artisans near Wangu who are, from time immemorial, raising the salt from the wells and drying them in pans in ways reminiscent of the Pacific regions of Polynesia. In Peru agricultural land was divided into church lands, common lands, and royal lands, providing the maintenance of the royal household which probably previously furnished the bulk of royal income and



thus the state revenue—the common lands in Manipur corresponded to the clan lands which were owned by the Sakers. Each clan had a "Piba" for whom distinct portions of the clan land units were arrogated for the purpose of clan worship. If the Brahmin priesthood had not come in as a separate factor, the theocratic tendencies in the state might probably have resulted in the centralisation of these Piba lands into something like the church lands, by virtue of their holding the clan or family god, which went in support of the sun-priesthood in Peru. Very similar to Peru we had the Manipuri Communal overseers of labour, e.g., Ithung to Puren and Thumjaorongba, overseers of salt, Ahakup, Lakpa, the chief overseer of "Ithup" in the Ahakup Pangoa with his staff and so on. A strict census of the adult male labour available in each "family-group" had to be maintained by the head of the family group, the "piba," for the central labour bureau, the "khoundin." There were also provision for roads and rest houses in pre-British days, but the analogy stops here. Though there was the control of the state for supplying the militia and public utilities, we have no sure record of the produce of the land being centralised in the royal storehouses. Each family group generally maintaining its own granary landed over no doubt a portion to the state. This portion of the grain taken by the state does not seem to be in lieu of taxes and the grain stored in the family granary was for the maintenance of the whole labour system while that taken by the state was for the distribution to the officials maintaining it. For the entire labour was commandeered by the state, yet the labourer had to do public service providing himself, for his own food, from the family granary. Each one had to serve in rotation, for a certain number had to be left at home to raise the crops for feeding the entire labour population. It is only with the advent of the British perhaps that regular tax is being imposed and the land revenue department had been organised directly by the British officers. Previous to that the entire individual obligation to the state was paid by labour and labour alone, and as the state did not maintain labour directly, it had no necessity of



commandering the entire produce of land in the central granary.

This comparison with the Inca system holds good so far as we speak of state socialism and may be contrasted with it as the Meret system is not a bureaucratic or autistic despotism like theirs. Is it not possible that the monarchies, community with a theoretically despotic king of the Meret adopted these socialistic principles together with the adoption of theocracy and dedication of the king. Some of the stages to this day are proclaimed in the story of the presentation of the image of Vesnu still regarded as the person itself of the king by Kingkumar, King of Pung. The dedication of the king further had an important consequence, it prevented him from freely mixing with those below him, no noble, however high in rank he may be, could enter the presence of the king unless bardoled, a behaviour quite contrary to that prevalent among the dwellers of the hills.

While the political administration was centred in the hands of the king assisted by the Brahmin priest, the details of judicial administration were left in the hands of clan groups mainly united in semi-primitive associations or secret societies as well as the labour bureau of 'khandu'.

Kinship groups and households owned property and formed units of ordinary affairs. Property consisted of movable property such as goods, furniture of the household, its equipments, cattle, tools, weapons, slaves<sup>1</sup> who were *manachant* and wives.<sup>2</sup>

Economically, as we have seen, Merets are agriculturists, hence the laws regarding property dealt particularly with land and its relation to the things upon it. The immovable property is individually owned and inherited, from parents to children. The land was inalienable, it could not be bought or sold under the native law, since it belonged to the individual, his family and his house in perpetuity. The owner had full right on the land, on everything upon it, could plant or cultivate anything he liked

<sup>1</sup> Cf. *Bureaucratic Community*, p. 28, and Maclellan, *ibid.* pp. 24-25.

<sup>2</sup> Maclellan, *ibid.* p. 19, and Hudson, *ibid.* p. 91.

in his portion. He could of course pledge or pawn his land for his debts. He may give the use of his land to another for cultivation with or without rent. Such an occupier does not acquire any right on it by prescription, so he must evacuate the land at any time after the harvest, if the owner gives him notice. In the older revenue system the land was of two classes—the Phramlon held by chief-holders and the Tounatou, held by ordinary cultivators.<sup>1</sup> The Tounatou was regarded to be owned absolutely by the man who had it, provided he contributed the prescribed amount of *Pan* (paddy) to the royal treasury.

*Rights of way* through another's land were recognised whenever necessary and such trespasses were sanctioned. There are rights of way by the general public for drinking purposes through every land which adjoins a stream.

*Borrowing and lending* was and still is of everyday occurrence owing to the continual obligations to give feasts and perform ceremonies. Sickness or death of a kinsman or other member of the family, and the payments of fines are a continual drain on a man who has to borrow to make his obligation good. Debt is a sacred thing and is thus inherited along with the assets. Dr. Hudson has well described the enforcement of debts as well as the pawning of himself, his slave or his wife.<sup>2</sup> On my enquiring other methods of realising debts one set of informers gave me that "Dharma" was not practised but to others, when I showed them the injunctions in *Manu*, VIII, 49 and *Bṛihaspati*, XI, 54-55, they seemed to affirm it, as such further verification is necessary on this point.

*Contracts* on oath and before witness were enforced. The oath to be taken was settled by the custom of the locality. A contract would terminate on mutual assent.

In the domain of *Criminal Law* the Meitais recognised murder, manslaughter, assault and theft, sexual irregularities, mainly breach of the laws of exogamy and breach of marriage

<sup>1</sup> Hudson, *The Meitais*, p. 89 sq.



rules. The major division of crime was crime against the king and revolt against authority. The crimes against the king mainly is treason which was punished with death by drowning with all followers or whipping to death, while any woman in it was eternally confined. The statutory punishment for adultery was realisation of a fine of Rs. 50 from the adulterer followed by a divorce. Rape is rare. Murder is almost always punished by death, though sometimes a distinction between design and accident was made in which case motivation was inflicted in the belief that the thing happened by being instigated by the evil spirit. Theft was generally cattle theft and was in early times punished with death. A thief was flogged for the first offence, mutilated as punishment for the second and put to death for his third. But later on banishment to a *bo* village together with a degradation of caste was substituted for death. The punishment in case of a woman was banishment or what the Chronicle called *Khangonza* which Prof. Hodson<sup>1</sup> has graphically described. The custom and procedure was to put the murderer to death in the same way as he committed it.

In order to understand clearly the juristic concepts and political institutions as correlated with economic type of life and material culture as well as definite psycho-sociological or psycho-ethnological tendencies, we would study side by side a Naga tribe on the one hand and a Kuki on the other, contrasted with the complex constitution of the Manipur State.

The lifelong studies of Dr. Hutton have enabled him to dissociate completely the Naga from the Kuki culturally and perhaps mutually. To us the important distinction would be to recognise in the Kuki a "migratory habit" a predatory instinct and a nomadism in strong contrast to the Naga's attachment to the village site and the ancestral grave. On the other hand the possession of a bachelor dormitory as a separate building is more in evidence amongst the Nagas. It is very hard to generalise

<sup>1</sup> *Ibid.*, p. 68.

features of difference all along the line. Outstanding linguistic and tribal features mark them out as separate entities. But there are many Naga tribes as well as quite different Kuki groups who differ amongst each other to a large extent. There are also Naga tribes within Manipur and outside it and similar is the case with Kukis. While it is premature to attempt to find out a Naga prototype common to all Naga tribes or a Kuki primitive substratum, we can at least find Naga and Kuki tendencies in contrast with Meitei system or outside it and thus arrive at a different socio-political force operating more or less in the same environment under different cultural conditions.

We pass on first to the Angamis who are mostly found outside the pale of Meitei influence though known to the latter as the Angamis. They offer many remarkable points of contrast with the Meitei system, showing more democratic tendencies and age-groups rather than a hierarchy of clans and officials. These peoples are active and warlike highlanders divided by internal feud seem to be a homogeneous community of hunters and agriculturists having no social stratification and distinction of rank due to birth and wealth. Simultaneously again we have besides the agriculturists, a group of artisans, i.e., blacksmiths, potters, etc., as well as hunters and fishermen. Thus they may be placed now in the second grade of agriculturists—the grade in which the produce of the soil forms the main source of subsistence though hunting and fishing have not been abandoned. But while akin to the Meiteis in definite settlements and segregated occupational groups their original dominant texture of hunting and agricultural life is the predominant note while amongst the Meiteis it is now-a-days industrialism. Thus it is that the Meiteis developed more fully the state while the Angamis had nothing better than petty chiefs and local councils. The democratic council also indicates a less rigid constitution and hence less centralised administrative and judicial machinery and greater functioning of customary law.



The Angami villages are organised on the basis of kinship but the whole tribe is regimented into mainly three confederacies namely the Angami proper of the Khonoma group, the people of the Kolama group, and the Chakrama group or the Eastern Angamis. They are related to the Khonoma Nagas on the east, Katcha Nagas and the Kabui Nagas of Manipal. Again a close connection between the Angami, Sema, Ao, Lhota, and Bengma Nagas is indicated from their legends of origin, one of which describes the Angamis as the eldest branch. Linguistically, Sir George Grierson places the Gimmis in the Tibeto-Chinese family under the Western Naga sub-group of the Assam-Burmese Branch.

They are organised into exogamic political clans. Their organisation as a whole and their tripartite grouping with all its societies is bound up very intimately with a rich ceremonial life. Descent is always patrilineal—the property is divided between the sons, the eldest getting the best head. The villages are all situated on the rugged crest of the Naga Hills where climate and soil allowed extensive cultivation. Most of them were in fortified positions or were constructed on spots which admitted easy defence. When natural fortifications were lacking ditches and ramparts were constructed. The number of rectangular huts all having a tendency to face east give the village a perfect poise and forms a seat of economic organisation. What attracts most in the sociological analysis of the Angami constitution is the *morung* or bachelors' dormitory serving also the purpose of plaza—a great rallying point of village life. All consultations are held in this *morung* which also serves as the hall of justice and at the same time it sanctions all sorts of operations.

Of paramount importance which bind together the members of the village community are the bonds of kinship which break up the village into a number of distinct groups. In this process of regimentation the Angamis form a close parallel to the Bontec Igorot of the Philippines with similar terraced agriculture who also are organised in large family groups and several such family



groups are combined in a large political unit similar to that of the Angamis. Each of the political units of both these tribes has its separate base of pasture with a governing council of elders that make peace and challenge war and so on. In both these tribes again the complex unwritten code is recognised by all the people and infringements are avenged by blood feud—the members of the wronged family louted the head of the transgressor and if they succeeded they were retaliated in the same way.

In their economic life there is great similarity and besides their developed system of terraced agriculture, they hunt wild animals, herd domestic animals, do some fishing, make implements of iron, utensils of wood as well as pottery and basketry along with their rice culture.

In these distinct groups or the clans all the members are usually related to one another by common descent. Thus the socio-economic unit takes its stand on the tie of kinship rather than on the common fertility or common land and men obeyed the laws of this kin group. The descriptions of Captain Butler and Captain Woodthorpe speak of the Angamis as possessing 'no regular settled form of government. With them might is right and this is the only form of law or rather the absence of all law—heretofore recognised among them (Butler, I A S B, XLIV, p. 314). Every man does what he thinks right—a form of democracy very difficult to conceive of as existing even for a single day yet it exists here is an undeniable fact' (J. A. I., XI, p. 68). This description of the psychology of the people seems to be more dominated by the idealistic conceptions of the noble-savage and does not seem to be actually warranted by facts. Each man is never for himself, he is a representative of his group sentiment—the interest of his kin—in a marked degree. The personality of every Angami is bound up with the kindred and clan and his

\* Cf. H. P. H. in 1912 speaks of these people as possessing a democratic nature of tribal arrangement among the Angamis. The intense divisions and feuds existing even among a village rendered it impossible to hope for success for the policy of extermination of tribes proposed by government. Also Meekens, p. 118.



kin is responsible for him for his misdemeanours as well as crimes—a case of collective responsibility. Further such association of an Aogun, with the whole society of his people may be described as tending towards communism where every individual is compelled to take a fair share of the duties of his kin and broadly speaking, his tribe.

Each village had a number of distinct families usually consisting of a man and his wife with perhaps two or more children. Generally there is one house to a family though occasionally there can be more than one in a single house. The cattle and the poultry—the pigs generally occupying another compartment under the same roof—belong to the family and so also is definitely apportioned the plum territories of each family. Thus the family is the nucleus of the individual economic cycle of life and activities. There is however the more important bigger group, *khel* which we term "family groups" as each consists of several families more or less bound together on traditions and bonds of kinship. They enforce important political and legal functions and the village is an aggregate of several *khels* and not of families. This is clear when we find the corporate body in the village—the village council consisting of the heads of the *khels*—"panmahs"—and not the heads of the families. Thus the village council is a sort of a corporative judicial and political unit constituted by the kinship grouping of *khels* and yet possessing territorial jurisdiction over all the *khel* lands. A third stage is discernible in the office of the Chief who symbolises as it were the territorial authority of the village. He is really a figure-head—the village council being paramount. But times of stress, danger and war have necessitated his existence. War, and specially head-hunting expeditions, lead to his election to an office and leadership.

The set of influential men called *panmahs* are also leaders of war presided over by the chief. These selected heads are chosen



in each generation for their personal bravery and capacity, the test of which lay in war, valour and victorious head-hunting which is also a wide-spread trait in the social organisation among the Philippine tribes. In times of peace this institution serves as the judiciary of the village. Blood feud and head hunting are closely interrelated and this constantly strengthens the authority of the council and the chief and also calls on them to function. At times the cross-currents of kinship in blood-feud undermine the authority of the chief. What he and his council as to do is to persuade or dissuade the parties either by force of good nature or by reasoning so as to soothe their prevailing passions. This position presents an extraordinary combination of traits. The individual, as we have seen, owes allegiance to the kin and the kin owes protection to its members against other kins, suggesting a sort of disintegration into wholly dissociated units in a village. No doubt the absence of a central authority to render decision binding on different kins, the zeal of a member of a kin to avenge the misdeeds of another group, proportioned to his proximity of kinship, the disproportionately low political powers of a chief when compared with his social eminence, and the corresponding tendency of the people towards some sort of an individual independence supports it. Yet in fact the whole tribe unites all these groups into territorial units and this by the force of the customary law revolving about all the "kin groups" which every one follows silently.

One of the fundamentals of their customary law may be studied with regard to the *penna* and *kenna*, a most important and superstitious institution in their daily life, sustaining the whole fabric of their social organisation. Both the terms generically mean the same thing as the *tapa* and act as a restraining principle in the judicial as well as economic life of an Angami which he would approach and handle with caution, to prevent the occurrence of harm on his part. For the ordinary man such a thing is always to be avoided as it is believed to impart to the man who comes in contact

with it, some sort of mysterious quantity which could only be removed by ritual performance of a magical kind. These *pennis* and *kennis* have again different degrees of intensity; some are treated with greater respect than others; the penalty of infringement varies correspondingly to the degree of intensity. Thus it assisted in the maintenance of law and order and its enforcement was of great help in the protection of private property. It further regulated their behaviour and enabled them to perform many things which they would not have done otherwise and served practically the purpose of coercive laws, on the belief that a sanction of supernatural punishment will follow. This gave the administration of justice a spontaneous or rather an intuitive course and was inherited along with the hearth.

The belief in the magical properties of the natural surroundings giving everything a material form as well as a life principle, acted as an incorporeal police. *Gennas* related to it and guarded the careless behaviour of individuals, thus regulating the life of every man by a system of stringent magical regulations for his welfare.

This authority is especially exerted by old men of the society giving the form of government which may be called gerontocracy. This body is marked from the rest of society by a sharp line. The function of this court of elders was to make equitable award so as to keep the peace and prevent the extension of wild and irregular blood-feuds. They do not go into nice questions as to the precise merits and demerits of the feuds, but prescribe certain tests, oaths and ordeals by which the appellant or the defendant may establish his case. It sets the litigant to attempt a test which if he performs he wins the case.

It should never be expected that the administration of law in the so-called savage and barbarous society of the Nagas, shall be surrounded with all sorts of legal formalities and safeguards on account of the

low stage of culture they are in. Yet they have regular forms recognised for procuring punishment of breach of tribal law or for reparation of wrongs. These are so well known that everybody knows them together with the methods of their invocation. Besides these, in the adjudication of every action each *khel* or kin-group thinks itself as an independent entity demanding a voice in all actions in common. Thus whenever anything of public importance arises or has to be undertaken, the whole village meet together in conclave so that in this respect every village forms a republic. Here again the council of elders takes the upper hand as a depository of traditions and at the same time, being the sanctioning authority, keeps pace with the *khels* individually whose rise to power was again checked by the blood-feuds, head hunting, etc.

In the sphere of criminal law also kinship played a vital part, perhaps equal to the part it played in social organisation and social intercourse.

Criminal law

In all offences again relatives stood as one. Each person here also could be responsible for the acts of his kinsmen. This principle of collective responsibility very well forms a basis of comparison with the *Omahas* of Nebraska where also the individuals were held responsible to their kindred and in cases involving two groups of kindred the one group was held responsible to the other as also with the frank pledge system of the Anglo-Norman. All the private crimes such as assaults, adultery within the kin group were settled between parties and their relatives with the help of go-betweens. Offences which came under the judicial cognizance of the tribe fell into two groups according to their methods of adjudication and punishment. The first group comprised of offences which were to be punished immediately by the hands of the aggrieved person or his party and privy. These were the major offences like wilful murder and breach of rules of exogamy. For these, specially murder, no kind of machinery to determine his guilt or for reaching the decision concerning punishment was quite

necessary and the relatives of the murdered person speared the murderer at the very first opportunity without any reference to the council of elders, for killing him for the murder of his relative was a "sacred duty never to be neglected or forgotten." This theory of spelling blood to satisfy the injured party may be contrasted with that of the tribe of the Narringveri administered by *tench* for every "clan" where "all offenders are brought to this tribunal for trial." In case of murder the fellow clansmen of the murdered person will send to the friends of the murderer and invite them to bring the murderer to trial before the united *tenches*. An enquiry was made and if the murder was proved he was punished according to the degree of his guilt so that a murderer with malice aforethought was put to death by spearing while a manslaughterer received a thrashing or banished from his clan and so on. In this category again the husband of a woman used to spear the adulterer on the first opportunity. The woman was also punished before the council of elders which is a contrast to the custom of Iroquois of North America<sup>1</sup> where woman was regarded as the only offender of adultery and so punished alone.

In the second category fell the minor offences like culpable homicide not amounting to murder, theft and offences against the society which were adjudicated before the council of elders and the usual redress was fine or restitution of the thing with payment of seven times the value of the thing stolen. A thief caught red-handed could be given the severest penalty known to men by the offender. However to charge a man with stealing without being able to prove it meant a blood feud. Man slaughter and culpable homicide were punished by banishment according to the degree of seriousness.

Disputes regarding property were rare owing to the group interest existing as the unifying tie through the individualistic idea of proprietary right in the real estate, and the existence of

<sup>1</sup> Tapao, 'N. T. R. Australia' as quoted by Baskin in "Primitive Law" pp. 171-72. Morgan League, I, 271.



prohibitive taboos governing all these rights. Offences of breach of these rights were punished with fine payable to the village or the clansman as the case may be and of expulsion in cases of aggravated offences, from the village. The ownership in the terraces seems to be individual and as such subject to sale and division between the heirs as Dr. Hutton holds, yet we have in every phase of the Angami property the keen interest of the group so that the individual rights in a land holding are subject to many claims on the part of the members of the kin and are governed, as we have said, by prohibitions having divine sanction. This conception of property exists side by side with the individual ownership in weapon, tools, clothings and other common articles and the conception of family and even individual ownership in food. Each family has its own plots of ground within the large cultivation area worked by the community which they could no doubt sell, and the harvest went to the private stores.

*Rights of fisheries* extend at the boundary of the village lands and are owned by the village as a whole while those in the special holes made, to collect these, by the owner of the terrace, are owned privately and any infringement of this right amounts to theft of a serious type.

Let us now come to the Kabui Nagas who are concentrated mostly in the south-western ranges of the Manipur hills. They have been living peacefully though hard pressed by the Khas and are the oldest of the Nagas under the protection of Manipur State. Originally they were head-hunters. In one of the recent religious revivalist movement, as is common amongst primitive tribes, they tried to revert to the major religious values of head-hunting—I refer to the movement of Jakhung.

These people form the southern neighbours of the branch of Nagas whom Dr. Broca described as the Kilyas. Amongst all of the authors including McCulloch, Brown, Donant<sup>1</sup> and Dunn have divided them into two groups namely Sangbu and Poeron living in fortified villages having dormitories for young

<sup>1</sup> J. R. A. I. N. S., Vol. XII (1890), p. 242.



men and women comparable to the Meims of the Kolya group. Dr. Watt (I. A. I., Vol. XVI, p. 35) speaks of the Kabuas having 3 great clans namely: 1st, Surgeu, 2nd, Kuveng, 3rd, Kaupui proper. In Damant and Dunn's<sup>1</sup> list the principal villages are Nangba, Kalanaga, Llanang and Laalong Khola. Our information from the villages round the Kingpukhul area revealed absolutely new names of the divisions; none of them know anything about the Singha and they classed themselves into Hame Kvaous and Puereng Kidous namely, linguistically different from each other and proclaiming to be the old and new branch of Kabuas. The third classification was into Maringme, the dwellers of the plains, who mainly have matrimonial relations with Purongs only.

Hablaase and others, on the authority of Dr. Watt, have placed them into the second grade of agriculturists, though some of the villages practise jhumming. But the rearing of *nathans*, pigs and poultry and in some cases their present use of plough brings them in relation with the Ibhumis (Hedgson, p. 154, quoted on p. 25, etc.). They with the Nagas in general further live in substantial houses of logs and bamboo, and use the hoe as their main implement for cultivating. The use and make of some musical instruments such as drums, sarungs in their dances and building of cane bridges on the rivers brings them to a still higher stage of culture. Thus it is very difficult to place them into watertight compartments as it is too late to dissociate from them the inceptions by culture contact of forest and reef; as such we should take them as we find them, whatever the cause may be which brought them to the present level, when it is not possible to discern the more recent changes. But we may note here that in spite of this higher phase in culture, however, the living in bands in small villages with exogamous groups bound by the ties of kinship or supposed relationship between the members, fortified by magico-religious ideas, place them in a lower economic order.

Villages like those of the Angamis are built on fortified spurs of hills protected sometimes by wooden palisades. Each family consisting of father, mother, sons and their wives and children live in a house. Unlike the Angamis all the clans in the village live in harmony and further the unity of the clan-groups is an everyday thing. Their economy is bound up with two main occupations namely, hunting and agriculture. The women of the household co-operate in planting and harvesting the paddy. Hunting and also fishing are pursued during non-agricultural days.

All the members of the community are organised according to a system of age-groups. The device of marking grades of social maturity by difference of costume and ornaments among them forms a beautiful comparison with Nagas as well as the Meitais.

The whole society is associated with a rich communal life. Feasts occupy an important place in their culture and distribution of resources in the communal enterprise is an affair of excitement and pleasure. The division of sexes is well-marked during the genna days.

What attracts one in the village government of these people is the existence of a hierarchy of officials as a contrast to the Angami organisation. They are the Khullakpa, Lamlakpa Meitei-Lumpu and a few more graduated in a rank. These offices are common to all the Nagas and Kukis of Manipur and among the Nagas in Manipur are strictly assigned to certain families and are hereditary; while amongst the Kukis specially the Kom branch as contrasted with the Khongju branch, every grade has to be entered in order by performance of a mock election. This Kuki system of gradual rise has its economic importance again, in the system of initiation to a new office. Thus when a man attains to a new office he has to give a feast.

In the Kabui government it will be a mistake if we associate the Khullakpa with government as well as with the administration of justice. He was a war leader and had a great voice in sending head-hunting expeditions. In the religious aspect of

warfare also he had a prominent position. This religious rather than a political institution made him hereditary. We may compare this function of chieftainship with that of the Eddystone Island in Molanesis.

In the sphere of law his individual authority is eclipsed by that of the village council. This feature is recorded by Dr. Watt in 1887 that amongst the Khasis each village has its nominal hereditary chief who is however powerless the village being a miniature republic. This can be contrasted with the Angami division of a village into *khaw* and the Miao (Miao) constitution of a tribe under a single chief. Thus the Khasi living under the influence of the village council may be compared with such condition frequent amongst primitive hunting tribes. But it is also possible that the need for territorial integrity of the village for dealing with the state of Manipal led them to the adoption of a village chief not elected by kinship principle.

Amongst the Angamis the chieftainship is not hereditary but elective whereas among the Khasis it is hereditary. It is perhaps the peculiar correlation of religious functions with the office of chieftainship that makes it hereditary and not the influence of Meitei example. This is further brought out clearly in the area from the following instances. The Khasi Khohikpa succeeds his father as he is associated with priesthood and he appoints a priest to assist him for life. Among the Konyaks the office descends on the son on account of his authority in religion. In the Sema the chieftainship is hereditary and he announces all the gennas except those relating to crops which genna-announcer holds his office for life. Among the Khongyat Kikia also his association with religion and thus his sacred position makes him hereditary. While among the Ao the ceremonial aspect of their life is associated with *pa-rampyer* who is the man in high esteem and his office is hereditary - the chief not being so like the Angamis - holds his position for life. But the Gennabura of the Angamis is an institution which descends in his line for good.

It is possible that the association of priestly function with the chief and at the same time the subordination of the religious office to a secular authority, is the result of the Muter system on the one hand and the Kyki system on the other, or perhaps the hereditary chiefship is to be taken as a transitional stage from an elected chief to the feudalisation of the tribes in the area under a powerful political authority. It is however quite clear that a chief with these two functions is a much more powerful authority than one possessing merely secular authority. But it must be remarked also that the theocratic tendencies in the area are weaker in comparison to the federating and feudalising agencies which has led to the establishment of the smaller and bigger states and even of small empires such as the Arun, Kachari, Ahom, Meitei, etc. It is strange however that ethnographers of this area find the absence of any political organisation here, rather it is the bewildering variety of political organisations amongst the countless different tribes living in close contiguity to each other that gives rise to such ideas. Crude democracies, miniature republics, assemblies of the old few, autocratic or theocratic chief priests or dual rule of priest and the chief, confederations or single isolated units would be found in close juxtaposition in this area. The student of political theory may perhaps glean illustrations of all types of semi-political organisations in Assam and Upper Burma, may more, he can study the very dynamic forces in the making of different types in all their primitive simplicity here. Thus this is not the absence of political organisation but the variety and primitiveness of it that is the outstanding feature.

. Every village is a miniature republic which goes on smoothly, as all agree, to depend upon the strict observance of the natural laws of personal rights and property. There is no law-giver nor any elective governing body. The headman sits in the council to decide the crimes which are committed. The highest punishment the council can inflict is the expulsion from the village, otherwise blood feuds may arise.



# A SHORT NOTE ON THE PALEOLITHIC IMPLEMENTS SUPPOSED TO HAVE BEEN OBTAINED FROM THE SIWALIKS

By

DEHARANIDHAR SEN.

[The following implements have been lying in the shelves of the Anthropology Department of the Calcutta University for over ten years. They were handed over to me by Ran Bahadur L. K. A. Ayer as having been collected by Mr. K. K. Sengupta from the Upper Siwaliks near Simla. More definite information about their locality or stratigraphy is lacking and is yet to be obtained. But as they appear on the whole to differ from the South Indian types where heavy *coup-de-poinçon* and round scrapers predominate and as a group resemble more the Chou Kou Tien and other finds in China (as described in *Archives de l'Institut de Pékin* by a Chinese), these implements are brought to notice here. In the light of the recent discoveries of the de Terra expedition, they seem to have an importance in so far as they appear to bring definite evidences of Mousterian man with a Stone culture similar to the Chinese and having some remarkable affinities with the early Egyptian flourishing as far North as the Himalayas.]

With a few exceptions all the implements exhibited are undoubtedly Mousterian implements. Some have a technique very strikingly similar to the technique found in the lithic industry recently obtained in Sziang Oso Gol and Chou Tong Kouu in China. Though there are few of a different technique, these implements compare well with the Chinese as a whole. It is to be noticed here that this industry lacks the usual South Indian heavy *coup-de-poinçon* and round scrapers and can be distinguished by a distinct technique from the South Indian implements. The industry as a whole is characterised by the prevalence of lighter and smaller implements of undoubtedly Mousterian technique which stands comparison with the Chinese. The rock, in most cases, is pure quartzite or different types of the same. In two cases, the implements are of flint.



Of the total thirty-three implements described here twenty-four can be distinguished as smaller ones measuring from 4.68 cm. by 2.67 cm. by 1.10 cm. to 6.55 cm. by 5.25 cm. by 1.47 cm. Of these twenty-four implements, ten can be distinguished as Mousterian Points (S6, S8, S10, S12, S14, S16, S18, S23, S25 and S31) of these ten, three may be described as Racloir-Points (S12, S23, and S25). There are seven Mousterian Grattoirs (S7, S13, S24, S26, S32, S34 and S36) and six lames (S1, S17, S20, S21, S22 and S42) of which there is one Lame-Point, one Grattoir-Point and another *lame de couteau* (knife). There is one peculiar tool in the form of an arrowhead made of flint and slightly retouched at the margin but the point is blunt.

Of the nine larger implements (S1, S2, S3, S4, S5, S11, S19, S27 and S43) varying in size from 6.80 cm. by 6.10 cm. by 2.13 cm. to 11.20 cm. by 8.05 cm. by 3.10 cm., there are five different types of *coup de main* and of the remaining four tools, one may be a scraper (S4), one a scraper-Point (S27), one, a peculiar tool which may be called a Point, and the fourth may be simply described as a Racloir (S19). A brief but systematic and typological description will be found in the following pages.

#### A.—Point and Racloir Points

S1.—May be described as a Mousterian Point. Comparable with the diverse types of Mousterian Points with retouches and obtained from Chou Ton Keou, China, as figured in Plate XXIII, Fig. 2 (Pal. Hum. Le Paléolithique de la Chine). Also comparable with S31 which is a concave type. This implement is a convex type with a difference also noted in the medial ridges.

S12.—Racloir Point comparable with the flake with left margin retouched and superior extremity forming a chisel (*Eclat bord gauche retouché, extrémité supérieure forme ciseau*, Fig. 2 Pl. XXX (Pal. Hum. Le Paléolithique de la Chine).

S14.—Mousterian Point with retouches as in S10 and is strikingly similar to the Chou Ton Keou Point as shown in Plate XXIII, Fig. 4 (Pal. Hum. Le Paléolithique de la Chine).

S16.—Mousterian Point, broad triangular with retouched margin. One face worked. May be compared with the diverse types of Mousterian Points from China (Fig. 1-6, Pl. XXIII). The edges are very thin and the point is very sharp.

818—A peculiar tool which may be described as a Point, the point being broken at the head of the specimen. The edges are thick and rounded and not well retouched. It has a shouldered and crude appearance. The technique is very dissimilar with the other tools in this collection.

823—Racloir Point broad and leaf like, well retouched lamellaire, median ridge concave. This type is rare in China. Here too it seems this type is not very prevalent.

825—Somewhat similar to 823 but it is of convex type, leaf-like lameller retouched but not so marked as in 823.

831—Mousterian Point comparable with 810. Triangular or subtriangular—margin retouched. Two lateral ridges strikingly similar to the diverse types of Mousterian points from China shown in Fig. 18, 11. XVIII (Le Pas de la Chapelle). Very similar to 810 where there is a difference in the lateral ridges and which is convex, while in 831 we find a concave type.

832—Appears to be a Mousterian Point but a rude type, worked on one side and margins without any retouch. A marked finger-platform on one side.

### B.—Grattoirs.

The grattoirs are very meagrely represented in this collection. So also we find that in China the grattoirs are much less known than the Points and the lances, both of which are widely abundant there. In this locality, the Point is more prevalent than either the lances or the grattoirs.

837—Mousterian Racloir—concave and leaf like, margin very sharp, wavy and retouched, one side worked and flaked the other left plane. Axe-like and may have been hafted.

813—Mousterian Grattoir—Subtriangular, left margin very sharp but not retouched, convex. Thick butt end or hand hold at the two other sides opposite the sharp margin, where the thickness thins out.

824—Very concave Mousterian Grattoir—one side flaked the other plane, very thick and raised butt at the end. Other margins sharp. A very beautiful and distinct specimen and gives a core-like appearance. Rhombohedral.

828—Grattoir grosse (massive) convex. Facotted planes—left side

broadly lamellar—margins sharp but not well retouched, comparable with S13 but the handhold is not so thick and elevated more flat

S12—Grattoir court (small)—convex Leaf like and lamellar Margins not sharp neither retouched

S13—Grattoir court (small) more or less convex, left margins not sharp and retouched Sub triangular apex ending in a point

S15—Monsterialia n. 1200 convex—nugget shaped strikingly similar to the disque ovoide epais en quartzite (thick ovoid disc of quartzite), Fig. 5, Pl. XXII (La Pal. de la Chine)

### C.—Lames.

S9—Monsterial knife or blade (*lame de couteau*) Very thin curved tapering edge One margin retouched and used as the cutting blade the other is thick and rendered blunt so as to fit the hand and not in any way injure it Slightly curved to the left

S17—A very beautiful specimen of *lame grosse* (massive blade) slightly retouched at the cutting edge Long slender blade faceted and striking platform one side flat plane Comparable to the *grosse lame* obtained from China and shown in Pl. XXVI Fig. 1 (La Pal. de la Chine). The industry of *lame* is very in Chou-Tong-Keng where generally the technique is very mediocre and dimensions vary extremely Here also we meet with almost a parallel case but no conclusion can be reached since the *lames* are poorly represented in this collection.

S20—*Lame court* (short blade) distinct in technique (free from the last one (S17)—two margins sharp and retouched Comparable to S21 which is smaller and edges more sharp and thin This specimen can well be compared and contrasted with the blade with retouched margins (*Lame a retouches marginales*) shown in Pl. XXVI, Fig. 11 (La Pal. de la Chine).

S21—*Lame Point*, margin retouched Comparable to S20 with differences already noted there.

S22—Short notched blade (*Lame court*) Margin sharp and retouched

S43—Grattoir—*lame* Sharp and retouched margins and very deeply wavy Comparable to the tools S20 and S21.

**D —Bigger Implements.—Coup-de-poings and Scrapers**

S1—A very beautiful rectangular axe-type. Very sharp cutting edge, faceted and levelled. Heavy tool, thick butt-end very well suits the hand, the haft. It is a remarkable finished specimen. (Comparable to the Kenyan specimen, Pl III, Fig. 7, p. 45 (Stone Age Cultures of Kenya Colony by Leaky).

S2—A typical *coup-de-poing* roughly flaked over the whole of both the sides and with sharp irregular edge all round. Heavy with a thick butt-end and worked to a point by flake surface partially trimmed. Comparable to the Stollenbosch *coup-de-poing* (Lower Palæolithic Culture of South Africa), figured by Burkitt on page 71. Also comparable to the Kenya Acheulean unrolled *coup-de-poings*.

S3—A scraper axe-type—longer than round edges finely worked and thin, suitable for cutting. The edge is more or less oblique. The scraper progresses upwards to the sides from an elevated median part of the implement. The other face is all plane. Comparable with rolled *coup-de-poings* from the Kariandusi River site, Elementeita (Pl III, Fig. 6, p. 45, Stone Age Cultures of Kenya Colony by Leaky).

S5—Scraper type—margins retouched—one face flaked the other untrimmed and left plane, median ridge.

S11—Scraper form, but unlike S5—the faces not flaked. Only there is a medial ridge and the margin retouched. Characteristically curved and convex.

S19—Grattoir grosse (massive)—Left side platformed for hand-hold—the other margin sharp and retouched. There is a notch at the base. Tapering and pointed at the head.

S27—Racloir-point—rounded or sub-triangular thick, seemingly a crude type, a peculiarly shouldered implement. Butt-end thick, elevated, heavy tool.

## MEASUREMENTS.

No	Specimen No	Measurements	No	Specimen No	Measurements
1	M1	11.00 cm 3.34 1.25 4.78	18	E20	8.50 cm 3.34 1.25 4.78
2	M2	11.00 cm 3.34 1.25 4.78	19	E1	8.50 cm 3.34 1.25 4.78
3	M3	11.00 cm 3.34 1.25 4.78	20	E2	8.50 cm 3.34 1.25 4.78
4	M4	11.00 cm 3.34 1.25 4.78	21	E23	8.50 cm 3.34 1.25 4.78
5	M5	11.00 cm 3.34 1.25 4.78	22	E4	8.50 cm 3.34 1.25 4.78
6	M6	11.00 cm 3.34 1.25 4.78	23	E5	8.50 cm 3.34 1.25 4.78
7	M7	11.00 cm 3.34 1.25 4.78	24	E6	8.50 cm 3.34 1.25 4.78
8	M8	11.00 cm 3.34 1.25 4.78	25	E7	8.50 cm 3.34 1.25 4.78
9	M9	11.00 cm 3.34 1.25 4.78	26	E8	8.50 cm 3.34 1.25 4.78
10	M10	11.00 cm 3.34 1.25 4.78	27	E9	8.50 cm 3.34 1.25 4.78
11	M11	11.00 cm 3.34 1.25 4.78	28	E10	8.50 cm 3.34 1.25 4.78
12	M12	11.00 cm 3.34 1.25 4.78	29	E11	8.50 cm 3.34 1.25 4.78
13	M13	11.00 cm 3.34 1.25 4.78	30	E12	8.50 cm 3.34 1.25 4.78
14	M14	11.00 cm 3.34 1.25 4.78	31	E13	8.50 cm 3.34 1.25 4.78
15	M15	11.00 cm 3.34 1.25 4.78	32	E14	8.50 cm 3.34 1.25 4.78
16	M16	11.00 cm 3.34 1.25 4.78	33	E15	8.50 cm 3.34 1.25 4.78
17	M17	11.00 cm 3.34 1.25 4.78			



# SABOUREAN BEADS AND BANGLES

By

SUBANTA KUMAR ROSE, B.Sc.

A good number of beads of various shape and size are found at the megalithic site at Sabour. The most interesting among the beads are those which are painted. They have a very decent finish.

The materials used are mostly minerals of crypto-crystalline varieties of oxide of silica and broadly include opaque and colloidal quartz.

There are chalcedony of various groups—carnelian, chrysophore, agates, onyx, jasper, flint.

Some of the beads have been perforated, some are in making. These beads could be so arranged as to illustrate the method of making beads from a crude stone to a finished one. The technique of work, as shown, consists in pressure flaking and notching. Polishing is greatly marked in some of them.

In classifying the shapes of these beads we find (1) *Barrel shaped beads*, (2) *Oral beads*, (3) *Round beads*, (4) *Square beads*, (5) *Hexagonal beads*, (6) *Rectangular beads*, (7) *Pentagonal cylinder beads*, (8) *Pentagonal beads*, (9) *Tubular beads*, (10) *Square cylinder beads*, (11) *Drum beads*, (12) *Plano-convex beads*, (13) *Circular beads*, (14) *Plano-convex pentagonal beads*, and (15) *Plano-convex elliptical beads*.

216 beads have been collected from a place about half a square mile in area.

Taking the *plano-convex elliptical beads*, Nos. 103, 140 and 151, we note—

1st group—No. 103 is a transparent colourless crystal with a plano-convex cross section and elliptical transverse section. The

convex surface is rough. The plain under-surface has been flaked. It has not been perforated.

No 151 is made of agate with two translucent bands at one end. It is white in colour with a plano-convex cross-section and elliptical transverse section. It is unperforated and unfinished.

*2nd group — Plano-sub-convex pentagonal beads*

Nos 148 and 149 are the only two which have been shaped to a pentagonal transverse section with a rectangular cross-section. The apex of the convex surface is more or less parallel to the plain under-surface.

Possibly these were on the way of being made a double pentagonal-sided bead, having a raised pentagonal transverse section and two pentagonal planes on the two lateral sides, giving a hexagonal cross-section.

No 148 gives a distinct sign for that type as it has again been reflexed at the lower angular border of the under-surface, which makes the upper transverse sides pentagonal.

Both of these are made of agate and none are perforated or finished.

*3rd group. — Plano-convex and sub-convex circular beads*

*They are 16 in number.*

Nos 32, 77, 85, 86, 90, 145, 152 and 153 are plano-convex-circular beads.

All of these have plano-convex cross-section and circular transverse section.

Except No 32 which is made of smoky translucent quartz all are made of agate.

Nos 152 and 153 show that they were at first made a plano-convex pentagonal bead and then their pentagonal sides have been worked out as a plano-convex circular bead.

None of these has been perforated or completed.

*4th group — Nos. 79, 91, 147, 150, 154, 155, are Plano-sub-convex-circular beads.*

No 79 has 12 translucent natural circular bands in a space of 4 mm along the transverse section, none of these are perforated or finished.

Coming to the circular round beads they are found to be 19 in number.

5th group — Nos 74, 75, 76, 80 and 84 are very nicely flaked and notched to a perfect round shape. Though none of these are polished or perforated they show a completion of shape.

No 74 is deep smoky in colour and No 76 is a beautiful deep orange-coloured stone. The other colours vary from milky white to dull white.

No 95 is a nice example of a polished perforated circular round bead.

Though it is broken while perforating, the perforation is marked transversely.

It is milky white and has a shining colour.

The others vary in size the biggest in this collection approximately of 1.772 cm diameter and the smallest is approximately 7.18 mm. in diameter.

6th group — Taking the drum shaped beads, which are 19 in number, it is found that they vary greatly in size. No 8 B Y though broken is of 1.454 cm radius and 2.908 cm diameter and is the biggest of all and has been perforated vertically along the flattened sides. It has beautiful white natural bands diverging towards the circular border from the perforated centre along the flattened sides.

No. 8 B X is made of a beautiful agate which has about 100 fine white natural bands along the transverse circular region at a space of 1.372 cm. It has been polished.

The two flattened circular drum regions are rough. It is unperforated.

No 69 is a deep smoke coloured polished perforated bead having circular transverse section and a rectangular cross section.

The lateral flat sides are parallel to each other but rough and unpolished.

There is a beautiful white natural band at the centre of the circular transverse section. One flattened side is smoky and the other is white.

All others, Nos. 1, 47, 55, 67, 58, 59, 62, 63, 66, 67, 68, 72, 73, 73X, 73Y, 115 and 129, are in the stage of being made a rough circular transverse section and rectangular cross section.

None of these is either polished or perforated.

They vary in colour from smoky white to orange, most of them are banded along the transverse circular region.

Nos. 55 and 67 are orange coloured.

The smallest one No. 70, has 4.63 mm thickness and 5.6 mm diameter.

*7th group.—Flat tabular beads.*

These beads vary from 2.87 mm. to 6.61 mm. in diameter and 8.45 mm. to 1.63 mm. (195) in thickness.

The circumference of some of these tabular beads have been rounded off.

Nos. 108, 109, 194, and 134 are the broken pieces of these round circular tabular beads.

No. 194 is black but has a white band, mostly natural, along its transverse circular section.

They vary greatly in colour from brick red, white, milky black and smoky.

Some of them have natural thick white bands along the transverse circular region.

Nos. 403 and 497 are two broken pieces. The perforating is along the breadth. They are broken along the perforation.

The beads are 66 in number.

These are natural banded.

*8th group.—Pentagonal cylinder beads.*

No. 141 is the one found of that type.

It has been turned a little rough, giving five-barbed ridges running along its length. It has a pentagonal cross section and a rectangular transverse section. It is not perforated. It is made of smoky opaque agate.

Its median portion is thick and the two ends are narrow.

The transverse are at right angles to the length of the head.

*9th group.—Foliated barrel beads.*

These are 9 in number, and each one differs from the other in colour.

No. 137 is yellow.

No. 145 is pink with an orange tint.

No. 144 is light yellow orange.

No. 187 is milky white with a dull yellow touch.

No. 134 is yellow with an orange tint.

No. 135 is orange, crimson and yellow coloured in some proportions.

No. 136 is brick red and yellow mixed.

No. 136 is orange with white eye.

No. 138 is transparent or fool's glass.

Though none of these has been perforated or finished, only No. 136 gives a definite impression of shape. It is a fine elliptical eye bead along one of the sides and a circular cross-section and a barrel-shaped transverse section.

All these have smooth faces, do not show any being finished or polished.

The technique of work is limited to the pressure flaking.

*14th group - Square cylinder beads.*

These are 13 in number, of various colours, and most of them have beautiful bands running along the cross-section.

None of these are perforated or polished; they vary in length from 2.9 cm. to 8 mm. and 1 cm. to 1.5 mm. in thickness.

No. 142 is smoky at the two ends and have alternate white and dark bands of about 10 fine lines covering a space of 1.1 cm. It is flaked along its length.

No. 178 is a white centre square cylinder bead with no bands.

No. 188 is a beautiful smoky transparent square cylinder bead with a rectangular transverse section and a square cross-section. One end of which has possibly painted white, green and red.

It has been not fired but is not polished.

No. 180 is a beautiful coloured bead half of which has a medium brown colour, then comes a smoky band and again a series of brown fine bands pass along the cross-section which rests on the smoky portion, the bead then ending in a brown overhang, and

No. 135 is a dull orange coloured bead having a tendency towards the barrel shape. Its two ends being convergent makes the central portion thickest. It has although been flaked at right angles to its length leaving very fine sets of parallel ridges which runs at right angles to its length.

No. 139 is a dull brick red flaked square cylinder bead. A bulb of percussion is marked at one corner.



No. 140 is a cylindrical bead of colourless material. The colour runs from light yellow, orange, white to deep red. It is also flaked at rt. 2° to its length.

No. 141 is a cylindrical bead with smoky white ends.

No. 142 and 143 are two cylindrical beads with light smoky bands.

No. 144 is a white bead covered with streaks of orange yellow bands which are 13 in number.

No. 145 is a square bead with two ends of common colour with the lateral sides white and flaked at 20°.

No. 146. It is a cylindrical bead with a black cylindrical head, black cylindrical part and a black cylindrical tail. The majority of the portion is black and the central cylindrical portion is light yellow, orange and white.

#### 11th group.—Rectangular cylinder beads:

These are Nos. 147, 148, 149, 150, 151, 152 and 153.

No. 147 is a rectangular bead with a cylindrical head. It has attained the rectangular section at 10° to its length.

No. 148 is of deep green colour and at 10° it has attained the rectangular section.

None of these are perforated.

#### 12th group.—Square beads:

These are 45 in number. They range in length from 1.8 cm to 5.45 mm.

Nos. 108, 104, 106, 107, 109, 110, 200, 205, 113, 112, 114, 118, 110, 121, 127 and 119 range colour in from light orange to deep orange.

No. 120 shows parallel grooves going transversely on one of the lateral sides. It is an etched bead.

No. 111 is a smoky milky white, with the two longitudinal sides of the square being rounded off. It is made of a low grade opal stone.

Nos. 141, 142 and 143 are transparent colourless crystals.

Nos. 210, 209, 10, 11, 12, 13, 14 and 211 vary in colour from light smoky white to deep brown smoky.

No. 190, 202, 107, 203, 206, 196, 202, 204, 205, and 198 gradually move from smoky white to light black and white combined.

Nos. 21, 212, 123, 124, 131, 133, 122 and 214 vary from deep black to light black.

None of these has been perforated or polished, but all have attained a certain square shape. The flanges are sometimes done along the length, sometimes at an angle.

But when we come to No. 130 which is a too square bead with the angular points filed off — a process which gives 8 triangles in all to 4 and 4 square flanges, the other 2 flanges, two being on the two inter-perforation portions. It is made of transparent, flawless raw crystal. It has two been perforated one from the anterior or side then from the side opposite to it, or vice versa of each other. Possibly this was therefore rejected.

Both the grooves are marked out to show a clear way of boring in.

#### 13th group — Triangular cylinder bead

No. 131 is an example of this. It has a triangular cross-section and a rectangular groove on each side. It is made of transparent colourless crystal. It is unperforated and unfinished.

#### 14th group — Triangular prism bead

No. 132 is an example of this. It is made of a triangular prism, but the triangular cross-section is flattened on one side, rounded off and one surface has a hole.

#### 15th group — Hexagonal barrel bead

No. 133 is an example of this type. Though apparently not polished, it is very smooth. The surface is very flat and the edges are prominent. It is made of deep brown coloured stone.

16th group. — The most interesting among these collections are the painted and decorated beads which show a distinctive class by themselves.

Most of the beads are of a light brown or yellowish colour.

No. 134. This is a cylindrical bead, shaped as if it has been completely covered with a white paint, which has almost a powerful reddish tint. It is a beautiful example of a bead which is the original colour of the bead.

Another too painted bead, the next specimen is a one square bead, coloured red with square white band on each side and 5 dots

in the middle of the square band. Four dots are on the four corners of the square and one in the centre of the square. It is perforated.

This is No. 416.

There is another square tabular bead which has 4 thin square bands on the two surfaces and a band of coarse sand drawn strongly into the second band square.

It was merely pointed out that the pavements are not perceptible by hand. The heavy pavements are not and some white topped concrete were found in a few places. The road were also broken in some cases of the pavements which possibly it was broken while drilling. There is no pavement on some of the exposed surfaces.

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Now 100 and 40 are broken pieces of this type. They began with a short oval end and then diverge out to a flat end. Their two sides are rounded off and the pattern is to form short conical end to the broad end and they are present in the same soil as peristoma. **Plate II**

No. 19 is made of red iron and a natural stone which has been polished and which were once fastened to two opposite flat sides of the jaw of a small animal, the head of the head. This is a polished. At the head of the jaw where it is broken two perfect teeth are visible, but there is only one at the corner and which appears to have been broken when passed through a string.

No. 10. A *Centropomus* broken up in 1891. It is an orange-colored fish. The pectoral and anal fins are short, the dorsal fin is small and the scales are small. The head is small and the body is deep. It is a common species. It is a *Centropomus* and is related to the length of the head.

*Phyllanthus*

**Circular round bead:**

Now sit and look. But of these we made of granite-squared stone, and here are broken pieces. They are painted with white dotted circles, over the white ones.

See 410 and 411 are broken by pieces of regular round heads  
Their perforations are marked possibly broken while drilling

No 410 is made of dark (dark stone) which is painted with white pentagonal bands connected to each other.

No 411 is a white stone which has white pentagonal bands painted on it and the space in those pentagons has been painted with black colours. Perforation is marked.

#### *Flat Tabular beads*

No 414 is a complete specimen of the round or unperforated flat tabular beads. It is a black coloured perforated and painted bead. The white band on it is round and is unperforated. (Pl. II.)

Nos 419 and 420 are two broken pieces of similar specimens with white painted bands.

#### *Broken pieces:*

Nos 413 and 417 are two broken pieces white in colour but painted in black, the white bands being rhomboidal in 413 and pentagonal in 417. (Pl. II.)

In comparing these beads with other such finds I find great difficulty as there is no systematic record reported as yet for the beads from a monolithic site.

In taking the elongated barrel bead No 416 (Pl. II.) I must refer to a find by Dr. H. H. Hart who excavated them from Megalithic tombs at Raigir.

It is difficult to date these beads. Should I take the described finds to be identical with those that were the material at the very place later on when a more than settlement period? Any way I cannot but find that there was a workshop for making these beads and sending them out as trade goods. That is proved by the find itself being a series of unfinished beads. I have found big slabs of stones which must have been brought from other sites situated within a few miles of this place but no such small beads or deposits could be found. Many of the beads have attained full shape but the marks of workmanship are still left on them.

Except only one triangular cylindrical bead no triangular barrel bead was found. This might have given rise to a triangular barrel shape by rounding off the rounded sides. Mr. Horace C. Frank writes that beads of this shape were found at the 4th and 5th made of quartz and dates them about 2000 B. C. or earlier and that this kind of beads was known in Tassian civilization which is the earliest civilization yet found in Egypt.

Dr. Hunt has collected a series of 445 types - 2 of paper and one of Jasper

The transmission is controlled by the amount of quartz

There are square ventral plates in the Rupp collection, found along with these bivalves. These bivalves are particularly noted by their beautiful natural bands.

Coming to the hexagonal barrel head I have only seen a perforated specimen that is very rough cut and finished. It is of a deep crimson-coloured stone. (No. 401 Pl. II.)

A quartered *U. bispinosus* was found from a grave at L1. It is dated 8500 B. C.

[illegible]

Yves and the Minister had both had a previous job of some sort, serving the Duke of the Medici and others.

Female sexual selection among large birds, even birds, takes place. As many species are small or exposed to a natural selection, sexual selection may play a different role in natural differences.

and design have seldom been equalled.

Some people think that the only way to look attractive is to put on a lot of make-up and dye their hair. But I feel that the only way to look beautiful and nice looking with simple dress is to take care of your skin and natural colour.

$V_{\text{part}}$  and  $\Gamma_{\text{part}}$  are the partial velocity and partial frequency of branching, respectively. The partial branching frequency can be

No. 140. A very fine specimen of *Agave* with very fine lemon-coloured bands around it.

No. 1-7 R and S are now broken, except that they are on a white  
in colour.

Beards pointed and point of various shapes and degrees have been found in other parts of India as well. In the Indian Museum I have seen several beads from Andhra Pradesh N. W. of Howrah, Punjab from Ranchi, U. P. to Nagpur, from Malabar District, Nagpur Central Province and from Nepal Bazar, Sargodha District.

to the base of beak of various species from Argentina. I found one



coronal divergent perforated which has been perforated at the converging end and the other at the diverging end. I have seen many of these.

The collection from the Sabourian site shows a good collection in shape. There are some hexagonal beads, some cylindrical beads, some cylindrical barrel beads and tabular beads.

Among those found in Mahurjarai District, Nagpur, Central Provinces, most of these forms are present. There is one orange-coloured white and painted bead of the same just the same in character as No. 403 from Sabour.

The beads from Mahurjarai District are as follows —

Bead No. 100 is made of corundum, green stone is an elliptical and sharp bead. The perforation is slightly irregular.

Bead No. 110 from Sabour could be painted bead, it is though imperforate but has a good shaped perforated type.

Bead No. 120 is a hexagonal cylinder bead made of rock crystal dressed free by the collector. It is a perfect cylinder. No. 180 is the type of bead from Sabour, which is perforated. In my Sabour collection there is one of this type, No. 67 is a complete specimen from that site.

Bead No. 180 is a hexagonal cylinder bead made of green material whose transverse ends have been rounded off and the perforation is elliptical in shape. There are many of this type in the collections from Sabour.

In the chain of beads No. N. S. 140 there are seven beads which have pentagonal band painting over them. No. 147 from Sabour has a painting of that character.

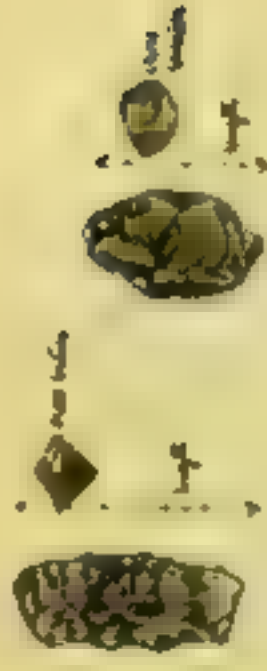
In specimen N. S. 140 there is one square tabular bead orange coloured and several pentagonal cylinder beads. There is one hexagonal tabular bead with its median portion raised.

There are many square tabular beads in my Sabourian finds, e.g., Nos. 203, 204, 210, 133, 131, etc.

As regards the pentagonal cylinder bead No. 111 from Sabour, though unmissable it has a fine pentagonal shape. There are no hexagonal tabular beads in my collection. I do not find these finds. My best thanks are due to Mrs. S. Mitra of Bhatgaon, Master Anvaychandra Dutta of Sabour and Masters Ashoke and Kalpankumar Mitra of Bhatgaon, who helped me in collecting these finds from the site.

I have special pleasure to mention that Prof A. K. Sen, M.A., Calcutta University, has kindly revised my paper. Mr. Dharamidhar Sen, M.Sc., has examined the materials used for making the beads and my brother Mr. Santo Bose has helped me in taking the photographs of the beads.

oval Bead in the making.  
(stone - chalcedony group)



O.B. 1.

O.B. 2.



O.B. 3.



O.B. 4.



Plate 13. Various Sphacurus heads with spicula.

# Sibourian Beads

No	Name	L	B	TA	Diam (2x)	Color	Remarks
141	Pentagonal cylinder head	1.335 cm	1.54 cm	1.334 cm		Light ash	
142		3.44 "	4.63 mm	5.45 "		Light smoky	
143		3.72 "	7 "			Deep emerald green	
144	Square cylinder head	2.5 "	7.54 "	8.18 "		Medium smoky at the top ends and white at the center	At least 40 fine smoky beads at the top
145		2.9 "	7.72 "	8.72 "		Medium smoky	
146		1.875 "	1.016 "	9.45 "		Light smoky	White border of beads and some of a pinkish tint
147		2.8 "	9.91 "	11.36 "		Dark smoky	Changing to grey
148		1.625 "	8.7 "	4.8 "		Light smoky and white above	Many fine inside showing the white beads
149		1.57 "	8.54 "	7 "		White edge and deep red tones	Two white and deep orange beads
150		1.45 "	9 "	8.63 "		Dark brick red	A cone of transition in green
151		2.7 "	7.7 "	4.62 "		Red white and black smoky	
152		1.55 "	6.75 "	4.75 "		White and orange yellow	Orange yellow beads at the top of the white bead



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Yours truly,  
J. Edgar Hoover

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• 2014 年 12 月 10 日

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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## KADJIKLAN BEADS AND BANGLES

Item	Material	Length	Width	Weight	Notes
10	Wood	1.5	1.5	1.5	
11	Wood	1.5	1.5	1.5	
12	Wood	1.5	1.5	1.5	
13	Wood	1.5	1.5	1.5	
14	Wood	1.5	1.5	1.5	
15	Wood	1.5	1.5	1.5	
16	Wood	1.5	1.5	1.5	
17	Wood	1.5	1.5	1.5	
18	Wood	1.5	1.5	1.5	
19	Wood	1.5	1.5	1.5	
20	Wood	1.5	1.5	1.5	
21	Wood	1.5	1.5	1.5	
22	Wood	1.5	1.5	1.5	
23	Wood	1.5	1.5	1.5	
24	Wood	1.5	1.5	1.5	
25	Wood	1.5	1.5	1.5	
26	Wood	1.5	1.5	1.5	
27	Wood	1.5	1.5	1.5	
28	Wood	1.5	1.5	1.5	
29	Wood	1.5	1.5	1.5	
30	Wood	1.5	1.5	1.5	
31	Wood	1.5	1.5	1.5	
32	Wood	1.5	1.5	1.5	
33	Wood	1.5	1.5	1.5	
34	Wood	1.5	1.5	1.5	
35	Wood	1.5	1.5	1.5	
36	Wood	1.5	1.5	1.5	
37	Wood	1.5	1.5	1.5	
38	Wood	1.5	1.5	1.5	
39	Wood	1.5	1.5	1.5	
40	Wood	1.5	1.5	1.5	
41	Wood	1.5	1.5	1.5	
42	Wood	1.5	1.5	1.5	
43	Wood	1.5	1.5	1.5	
44	Wood	1.5	1.5	1.5	
45	Wood	1.5	1.5	1.5	
46	Wood	1.5	1.5	1.5	
47	Wood	1.5	1.5	1.5	
48	Wood	1.5	1.5	1.5	
49	Wood	1.5	1.5	1.5	
50	Wood	1.5	1.5	1.5	
51	Wood	1.5	1.5	1.5	
52	Wood	1.5	1.5	1.5	
53	Wood	1.5	1.5	1.5	
54	Wood	1.5	1.5	1.5	
55	Wood	1.5	1.5	1.5	
56	Wood	1.5	1.5	1.5	
57	Wood	1.5	1.5	1.5	
58	Wood	1.5	1.5	1.5	
59	Wood	1.5	1.5	1.5	
60	Wood	1.5	1.5	1.5	
61	Wood	1.5	1.5	1.5	
62	Wood	1.5	1.5	1.5	
63	Wood	1.5	1.5	1.5	
64	Wood	1.5	1.5	1.5	
65	Wood	1.5	1.5	1.5	
66	Wood	1.5	1.5	1.5	
67	Wood	1.5	1.5	1.5	
68	Wood	1.5	1.5	1.5	
69	Wood	1.5	1.5	1.5	
70	Wood	1.5	1.5	1.5	
71	Wood	1.5	1.5	1.5	
72	Wood	1.5	1.5	1.5	
73	Wood	1.5	1.5	1.5	
74	Wood	1.5	1.5	1.5	
75	Wood	1.5	1.5	1.5	
76	Wood	1.5	1.5	1.5	
77	Wood	1.5	1.5	1.5	
78	Wood	1.5	1.5	1.5	
79	Wood	1.5	1.5	1.5	
80	Wood	1.5	1.5	1.5	
81	Wood	1.5	1.5	1.5	
82	Wood	1.5	1.5	1.5	
83	Wood	1.5	1.5	1.5	
84	Wood	1.5	1.5	1.5	
85	Wood	1.5	1.5	1.5	
86	Wood	1.5	1.5	1.5	
87	Wood	1.5	1.5	1.5	
88	Wood	1.5	1.5	1.5	
89	Wood	1.5	1.5	1.5	
90	Wood	1.5	1.5	1.5	
91	Wood	1.5	1.5	1.5	
92	Wood	1.5	1.5	1.5	
93	Wood	1.5	1.5	1.5	
94	Wood	1.5	1.5	1.5	
95	Wood	1.5	1.5	1.5	
96	Wood	1.5	1.5	1.5	
97	Wood	1.5	1.5	1.5	
98	Wood	1.5	1.5	1.5	
99	Wood	1.5	1.5	1.5	
100	Wood	1.5	1.5	1.5	

## Subspherical Bead—cont'd

No.	Shape	Size	L	B	Tb	Diam (L)	Colour	Remarks
119	Square bead		8.61 mm	7 mm	6.73 mm		Deep black	
120			8.45 "	8.30 "	6.61 "		Shady on white	White bead
121			2.45 "	1.845 "	7		Transparent	
122			8	7			White and black	Do
123			9	7.75 "	6.63		Do	
124			8.65 "	6.74	5.16		White	Black white bead
125			7.71 "	7.75	6		Light black	White bead
126			6.30	7	4		Dark	
127			8.19	6.45 "	5.75 "		Orange	
128			7.60 "	7 "	6 "		Do	
129			7.15 "	6.64 "	4.75		Black	Do
130			7.75 "	7.85 "	6		Transparent	
131			7.18 "	6.70 "	5.54 "		Shady	Do
132			5.45 "	6.65 "	5.45 "		Shady and white spots	
74	Spherical round bead					1.61 cm	Medium shiny	
75						1.61 "	Pink white	
76						1.45 "	Orange	



No.	Name	L.	B.	Th.	Den. (gr.)	Remarks
13	Drum head		1.45 cm.	1.54 cm.	brassy	White ring
17			1.67 "	1.7 "	Levian white	White ring band
20			1.74 "	1.16 "	Smoky	Do
21			1.54 "	1.12 "	Levian smoky	Do
24			1.7 "	1.11 "	White and black	
27			1.7 "	1.17 "	White	Black white ring
32			1.45 "	1.045 "	White and black	White and smoky bands
33			1.7 "	1.075 "	Light brown	White band
37			1.7 "	1.075 "	Levian smoky	Levian and brown white band
115			1.7 "	1.045 "	White	
1			1.36 "	1.36 mm.	Do	White bands
65			1.63 "	1 "	Levian white	Do
66			1.50 "	1.10 "	Do	
69			1.45 "	1.63 "	Deep smoky	White bands perforated
737			1.7 "	1.77 "	Levian	White band
122			1.63 "	1.06 "	Do	Do
74			1.45 "	1.57 "	Smoky	Do
75			1.65 "	1.54 "	Black and white	Do



No.	Description	Length	Diameter	Weight	Color	Material	Notes
137	Elongated barrel bead	2.101 cm.	1.046 cm.	—	—	Orange yellow	
138		27	1.173 "	1.11 cm.	—	Orange	
139		1.646 "	1.126 "	0.25 mm.	—	Do.	
140		1.554 "	1.064 "	0.34	—	Colorless crystal	
141		1.718 "	—	—	1.164 cm.	Yellow white	
142		1.894 "	1.61 "	0 mm.	—	Pink	
143		1.543 "	0.63 "	1.11 cm.	—	Dark-red	
144		1.763 "	0.45 "	1.731 mm.	—	Orange and brick-red	
145		1.6	—	—	0.72 mm.	Orange	
146	elliptical bead	2.27 mm.	1.18 mm.	—	1.6.04 "	Colorless crystal	
147		1.2	1.046 "	—	1.6.23 "	White	
148		1.3	1.136 cm.	—	1.1	—	
149	barrel bead	1.41 "	—	0.31 mm.	—	White	
150		1.046	1.72	—	—	White with sandy spot	
151		1.72	1.2	—	1.2 cm.	Beady	
152		1.44	—	—	—	White	
153		0	—	1.072 "	—	Do.	
154		1.072 cm.	1.271 "	—	—	Do.	
155		0	—	—	1.163 "	Do.	
156		0	—	—	1.979 "	Milky white	

White eye bead on top side.

## Sulphurum Redymum Ltd

No.	Specimen	L	B	Th	Diam. of	Color.	Remarks
155	Flake coarse bead			1.62 mm	1	mm	Many white
156				1.81	1	1	White
157	Flake coarse bead			1.85	1	1	White
158				1.54	1	1	White
159				1.18	1	1	White
160				1.43	1	1	White
161				1.40	1	1	White
162				1.40	1	1	White
163				1.40	1	1	White
164				1.40	1	1	White
165				1.40	1	1	White
166				1.40	1	1	White
167				1.40	1	1	White
168				1.40	1	1	White
169				1.40	1	1	White
170				1.40	1	1	White
171				1.40	1	1	White
172				1.40	1	1	White
173				1.40	1	1	White
174				1.40	1	1	White
175				1.40	1	1	White
176				1.40	1	1	White
177				1.40	1	1	White
178				1.40	1	1	White
179				1.40	1	1	White
180				1.40	1	1	White
181				1.40	1	1	White
182				1.40	1	1	White
183				1.40	1	1	White
184				1.40	1	1	White
185				1.40	1	1	White
186				1.40	1	1	White
187				1.40	1	1	White
188				1.40	1	1	White
189				1.40	1	1	White
190				1.40	1	1	White
191				1.40	1	1	White
192				1.40	1	1	White
193				1.40	1	1	White
194				1.40	1	1	White
195				1.40	1	1	White
196				1.40	1	1	White
197				1.40	1	1	White
198				1.40	1	1	White
199				1.40	1	1	White
200				1.40	1	1	White

10	1.49	"	1.015 "	Sandy	Do
11	1.45	"	1.1 "	White	White bead
12	5.7	"	1.575	Light brown	Do.
13	1.65	"	1.184	White and brown	Do.
14	1.57	"	1.445 "	Do	
15	5.54	"	1.1	Do	White bead
16	5.63	"	2.45 mm.	White	Do
17	5.45	"	1.1 cm	Do	Do
18	1.37	"	1.575 "	Sandy	
19	1.72	"	1.1 "	Do	
20	3.45	"	1.165 "	Sandy white	Sandy bead
21	4.45	"	1.015	Do	
22	6.18	"	1	Light olive	White bead
23	1.67	"	9.65 mm	Sandy	Do
24	5.65	"	9.36 "	Do	
25	1.77	"	9.97 cm	Pink	
26	1.77	"	9.97 mm	White	White bead
27	5.25	"	1 cm	Pecan	Do
28	1.42	"	9.45 mm	Light brown	Do
29	3.54	"	1.01 cm	White and brown	

## Sabouron Beads—contd

No.	Name	L.	H.	Th.	Diam (2r)	Colour	Remarks.
4	Flat circular tabular bead		"	3.72 mm	9.45 mm	Dusky white	
25				1.65 "	10.16 "	White	
26				3.16 "	9.81 mm	Light buff	
27				4.36 "	9.44 "	White	White band
28				6.72 "	9 "	Do.	Do.
29				9.45 "	1 cm	Do.	
30				2.37 "	5.63 mm	Do.	
31				3.05 "	8.16 "	Do.	White band
32				3.86 "	7 "	Brown and white	
33				3.27 "	4.54 "	Do.	
34				3.44 "	8.41 "	Pink and white	
35				4.26 "	4.54 "	Cream white	Do.
36				2.43 "	9.77 "	Dusky white	
37				3 "	9.45 "	Light brown	White and black band
38				4 "	7.36 "	Do.	Do.
39				3.13 "	6.34 "	Do.	
40				4 "	4.01 "	White	
41				3.37 "	8.46 "	Do.	

13	2	6.02	Do.	The circumference is measured and possible, it is broken, white material band in all these beads from 100 to 400
70	4	7.84	White	
17	2 19	8.27	Do.	
150	1 79	7.79	Black and white	
16	4 45	7.45	White	
71	3 27	6.45	Black and dun white	
86	3 18	8.36	Do.	
159	7 36	9.72	Lemon white	
104	6 36		Dull white	
156	1 7 27		Do.	
85	8 63	1.5	Light brown	Kept No. 85, all are broken therefore data is not available No. 407, 410 are broken white per- fecting
407	4 45	1.002	Black and white band	
198	4 44		Do.	
604	8 45		Do.	
79	1 073	1.154	Lemon	
Plano-convex cylindrical bead				Fine white beads

No.	Name	L	R	Th	Diam. D.	Colour	Remarks
101	Flagon-shaped circular head			7-8 mm	1.054 cm	White	
102				6-7 "	1.354 "	Do.	
103				9 "	1.1 "	Do.	
104				7-8 "	1.2 "	Do.	
105				6 "	9 mm	Do.	
110	Pentagonal head	11 cm	1.315 m	11 cm		Do.	As described in p. 100 1.254 cm in diameter
120	Triangular head	1.944 "	2.63 mm	7 cm		Translucent opaque	
130	Square head with three sides	9.30 mm	8.72			Do.	Perforated from both sides when the head is complete
135	Painted head						
145	Square labial head	1.343 cm	1.672 cm	6.34 mm		Orange	Square and round bands broken
154	Flat labial circular head			6.8 "	1.8 m	Deep black	White band along the circular border per forated and painted Do.
160	Do broken			6.26 "		Do.	Do.
165	Do			5 "		Black	Do.
170	Circular labial head	1.1 cm	8.81 mm			Orange white	White painted
180	Circular diverging flat head			6.65 mm		Orange	White bands circling along the border painted



# SABOUREAN BEADS AND BANGLE.

101

White bands along the  
margin, perforations and  
junctions.

Dark white

Do

White  
beads

Do

Orange-brown

Long perforations black  
perforations white  
spots between perforations

Very small

Very small, rounded  
beads.

Black

Orange

Do

Black

White and black

Orange

White and black

Do

Deep orange

White

White

Do

Do

472 "

Circular round bead

Do broken

Broken pieces of various  
shapes.

Circular bead

Irregular shape

Rectangular, broken bead

Irregular

Bangle

Broken piece

R

(Curved shape) B

92

405

410

411

404

412

417

106

107

# FISHERMAN OF THE EAST-COAST OF INDIA

By

DHARANIDHAR SEN

[A few words must be said before the book is taken in hand. This account is very general and mainly descriptive, and here not more as a working concept. Rather written in a popular sense its purpose is to give to the reader a very general idea of the Nuhas, both socially and geographically. In this respect I am very sorry that I must mention the name of Prof. H. C. Chakrabarti M.A. (under whose guidance we took the Nuhas on our last excursion) strangely by the University of Calcutta in January 1931. Several of his publications, yet unpublished, regarding the Nuhas as a racial type are very interesting and are certainly throwing some light on the hitherto unnoticed class of fishermen. Much debt is also due to B. Nirmal K. Bose, M.Sc., a well-known worker in the field of anthropology.]

The Nuhas or the caste of fishermen occupying the east coast of the Indian Peninsula, from Lonastak to Vizag and a little southward, maintain their existence chiefly by catching fish in the open sea, the Bay of Bengal, and, not in the inland lakes or rivers, with the exception, we know, of only one group living near the Lake Chilka and fishing in that lake. It is said that fifty families of these men were imported by the British Government from the Gargam coast and were made to settle at the Puri coast for the purpose of conveying goods to and from the ships calling at the port of Puri. The importance of Puri as a port has long ceased and the men, being out of occupation, took to fishing. In Orissa they are called Nuhas or more correctly Nahariya, i.e., the people who work on the waves (perhaps the word has something to do with the Bengali word 'Fahar' phonetically), but the most numerous section among them call the selves, 'Wada-balip'—a Te'ugu expression meaning the ship's crew or mariners. Members of a smaller section designate themselves as

'Jālān,' workers at the net. It is curious that there is neither cannibis nor commensalism between them and each section thinks itself superior to the other. There is a tradition that the art of catching fish was originally learned to the Jānā and stories are told how a clever Wādhān managed to learn it from the Jānā who wanted to keep the monopoly of nets a trade secret. One of the stories goes that a new net was woven every day and was burnt out every night lest it be stolen. At length a clever Wādhān hit upon the idea to examine the burnt ashes of the nets and thus came to know of their secret. This story told and retold among the fishermen, is fabricated by the Jānā who aim superiority in their trade. It has some grains of truth for as it is said, these Wādhān from their very birth were not fishermen but landed ships that sailed many an interlude with the islands of the Indian Ocean till the Muslims when it was cut short by Portuguese pirates and later almost put it out at the East India Company. The seafolk thus thrown out of their occupation had to resort to adopt fishing for their subsistence.

Another section of the fishermen, calling themselves Kālānā from Kālānā, a Sanskrit term meaning the crew of a ship, is said to have migrated into Orissa before the Wādhān were imported. Inter-marriage obtains between these two sections, evidently showing that they represent two waves of the migration, the earlier wave migrants — the Kālānā who have nearly forgotten their own language and have adopted the Oriya tongue. The Wādhān have come recently, it is said, three generations ago i.e., when their grand-fathers came and settled in Orissa. They thus still retain their own speech. Stimulated by the success of the settlers, the Wādhān have been crossing to Puri from the Vizag and Ganjam coasts and those settled at Puri and along the Orissa coast still maintain their connection with those districts and speak in Telugu, though many of them can speak Oriya too.

Out of 107 individuals whose measurements were taken 17 individuals have been dropped as having been either under 20 years or about 60 years of age so that we got a series of 150 full-grown individuals on each of whom we took 30 direct measurements, of which 13 were taken on the head, 16 on the body and the limbs measured standard and also three additional measurements i.e., height



Miss Mary J. Smith

1885



Mr. J. M. Smith

1885

supersternum, both sitting and standing, and the path of the heart were taken also according to the methods recommended by Martin. A more complete series could not be taken and important indices and curves have been determined, which will now be concisely described.

In stature these Nubians are taller than . . . The average stature of 100 men was 162 cm. . . . below the median as fixed by Martin (1926) cm. . . . The percentages are as follows: 20% are short, 20% below the median, 40% at the rest of the range of medium stature and 11% above the median, none, of the 11%, every third fraction are 1.75, or taller, or the average.

With regard to the head form, they are predominantly longiocephalic, the mean cephalic index being 75. . . . of the whole series are doliocephalic below 70, 15 are brachycephalic and only 6% are brachycephalic.

The nose of the Nubians is predominantly . . . the mean nasal index being 75. . . . that of the series 1. . . . shape nose while 21% are leptorrhine and 11% are platyrrhine. These men are at the same time hypsacephalic, the leptylocephalic index being 61.9 (average) . . . of the series, 62% possess the hypsacephalic head with a high vault, 17% are orthocephalic while only 12% are chamaecephalic.

The Nubians have pointed hair on their heads as will be seen from the plates. The colour of the hair is black wavy and sometimes curly.

The Nubians show a brownish black, often lepto-brown skin colour. Of the 100 men 70 or 27% only measured on the Von Linné's colorimeter.

Thus summarising the physical features of the Nubians we find a people who are long-headed, . . . and of medium and short stature, with plentiful black wavy hair and brownish black skin. We have here then a model of what the celebrated anthropologists (Gustaf Ruggieri and Hutton) describe as the 'Levantine' type. According to Prof. Huxley, who statistically and in much detail analysed the measurements of the population of Egypt with the French speaking people whose measurements have been given by Lharten. His figure agree closely with our findings but it may be noted that they do not represent one single homogeneous caste as in our

case. The Armenoid or Levantine type (brachycephalic) is not prominent among these tribesmen as is seen from the calculations of crania and of cephalic and mesocephalic. This is what may be fairly expected as the Persian type comes into prominence among the higher caste Dravidians, the untouchable lower castes like that of the Nulias who are not even allowed to enter the Jagannath temple at Puri having very little of the admixture. Of brachy lepto type there is none in our series but the dolicho lepto is represented by 33 individuals including some of the tallest men of our series. Here according to Prof. Hakkiohar there is a perception of the so-called Indo-Aryan type of crania. The dolicho platy is represented by only 11 including one with widest nose which points to the fact of a pre-Aryan but element being present in our subjects—which may be called the Nishad element or Chanda.

The Nulias like to live in colonies and build their huts close to one another. In a typical Nulavillage the huts are all arranged in parallel rows in one line or according to the wind so that their habitations can be saved from the ravages of storms well known in those areas. There are narrow paths rows parallel to one another and the open space between any two parallel series serve the purpose of passages. But it seems the spacing is not planned but left at random. In a single row often there are fifty huts and in a typical colony there are usually ten or twelve such rows. The house of an individual is very simple. Usually for a family there are three rooms and a courtyard at the back (western side) where kitchen vegetables are grown. Usually each family keeps ducks and breeds them and there are shelters for them under the portico of their huts. The height of the hut is generally 2' and breadth 8', the front portico being raised 3'. There is only one window at the front and one main door. The walls are built of mud plaster and white washed. The roof is thatched with straw and bamboo ~~and~~ with strips of paper. The wooden part the portico and door steps with Alphonis in very handsome designs. They have no furniture save and except a few utensils, sleeping mats and their instruments of occupation. The Nulias are very ignorant of hygiene and though they are a little bit dirty inside their house they are very filthy outside and throw all the refuse on the open space the middle of which is always filled with rubbish and serves as the public dustbin. The local municipality





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does not take any care and when an epidemic breaks out it often takes the most virulent form.

As regards their daily food they usually take rice steeped in water with dried cooked fish in the morning. Their midday meal consists of hot rice and salt. In the evening their menu is something better rice, rice and curry. When the men work on the shore their women bring them their food. On Mondays in the month of Kartick they observe fast. During Depurnima and Durgapuja they take only bread.

The ordinary daily dress of the Nulis is simple enough and there is nothing peculiar. They wear common white coarse cloth round their waist and above the knees and generally carry a napkin. Sometimes they wear a turban of cloth on their head. Their ceremonial dress consists usually of the white cloth worn round their waist down to the knees. Sometimes they use chaddar. So far as is known they have no seasonal dress.

The Nulis tribe is not economically independent. They are voluntarily dependent, i.e., they have to depend on others for their subsistence. Their hours for labour are from four in the morning, till 12 noon during March to November. Those who stay on during these hours generally do the knitting. From November to February fishing is continued day and night. They keep awake the whole of the night on the sea beach and watch for signs of the fish. The women's hours of work are from morning to noon when they prepare food and convey it to the men on the beach. Some women do the work of day-labourers and thereby earn a living. The actual budget is taken on the Depurnima day. The average income (November to February) of approximately ten to twelve men with one net is Rs. 100. There may be forty such groups working on the beach at Puri. From March to October the daily individual income is six annas for women four annas. The average income of a family of 3 members is Rs. 1. Average expenditure (necessity) is eight annas but there are supplementary expenses too. The men are heavy smokers and some times they drink too much and incur loss. It would be seen that from their income during March to November they will have to spend as for their food. Their savings are from what they obtain during November to February. The only means of life they deal with is the fish, the woman supply the labour. Their instruments of production

are the boat net thread, tanning materials, barks, barks, wood, about gun powder at areas of the sea carpenter's tools. They make all their instruments with their own hands except the carpenter's tools which they buy. Ownership is individual and there is no class distinction in ownership. But there is a good deal of social cooperation in their industry. The Mundas live to depend on the good will of the others and there is remarkable unity of each in its own group.

There are some interesting features which we noticed in the marriage system of the Namas. All the members of the two sections of the Namas—the W. group and the K. group—commonly speak of their system of marriage to Namas, so that it seems the Ghotra does not determine their marriage which is regulated by their own groups. On the Ghotra side there are also different groups, there may be a few more of the Ghotra and the Namas. Usually the Namas marry early. As a rule the respective ages of the boy and the girl are 17-18 and 12-14. It is highly important that the consent of the girl be the manner, is essential to make a valid marriage. The consent is obtained before an assembly of the elders. Coercive methods to induce consent are never applied, and, if detected, would make the marriage null and void. The ceremony is celebrated in the place of the bridegroom. The marriage ritual is elaborate. Here only a few salient points are described. After the formal ceremony of Baidin the astrologer selects an auspicious day and a priest is engaged. It will be seen that a Uripedi, a member of a privileged family from which the administrator of the village is selected, has a principal part to play and it is also interesting to note that nowhere except in the marriage ritual a priest is employed. Many features are common with the Hindu—beginning from Ghotra but there are many differences in detail. After the marriage proper is concluded the couple are conducted in a procession through the whole village. At their return the passage to the entrance is blocked by the younger brother of the bridegroom. He makes some customary objections and cuts jokes with the bride and when he obtains a promise that he will be married sooner he lets them go. It is highly significant to know in this wise that a widow may, if she chooses, marry the younger brother of her husband. But there seems to be no obligation. Any way we may infer that, though a man

form, levirate exists among the Nubas. Three days after the marriage, the husband sets out with the wife in an auspicious hour, for the house of his father-in-law and leaves his wife there. Sometimes after the formal ceremony of second marriage is gone through and the wife then returns to her husband's place and their marital life begins. In case of a widow marriage the formalities are usually omitted. Divorce obtains among the Nubas as a rule and is easy, for unlike the English laws, there are no prescribed reasons to show in order to obtain one. Simple disagreement may be the sole cause of a divorce but the Panchayet demands a fee of Rs. 15 and the party which seeks divorce must pay an additional amount of Rs. 10. But when sufficient reasons are forthcoming, this fee is usually excused. Cross-cousin marriage is also met with, the union being with the mother's brother's daughter. Sometimes polygamy is found. For instance, a sonless husband may seek a second wife but never a third, and he must, as a rule, divorce the first wife. But a very interesting case recently happened where a girl fell in love with a married man and things so led to a divorce through a series of dramatic events that the man had no escape but to be recorded to both women and the Panchayet had no option but to agree to a marriage. This illustrates the liberty and independence enjoyed by the women of the Nuba community. Divorce and re-marriage are necessary corollaries of the honoured place of women.

The most important person of the Wudhobys is the king of Mandisa, the Mailpa Narayari Sorant who is called upon to dispose of cases of social disputes which are long waiting and for which no solution is forthcoming. He is the supreme ruler and there is no appeal beyond his court. The kingship is hereditary. Under the king comes the village chief or the administrator elected from a family of rank and honour, the family of Auk. And he is elected from an approved body. The man selected is the Urpedi in whose hands the key of local administration is given. But he may be removed by the Nuba public for mismanagement or maladministration and sometimes the king of Mandisa is called upon to settle the affairs and his judgment is final. Sometimes a village secretary is engaged under the chief. On his election the Urpedi must obtain the royal consent. Now the whole Nuba organisation is divided into 13 sections, each of

which is called a *Birishi*. The village secretary under the *Triped* is called *Karpi* and also there is a *Birishi* who is designated as *Sonm*, *todu*. The *Ank* family is held in esteem due to the customary belief of the people that the chief village deity *Ank Palaman* was born in that family and members therefore take the name of *Ank Hanava* or *Ank Karamani* and so on. The *Triped* is elected from an approved body of the family of *Ank*. The offices of *Triped*, *Karpi* and *Sonm* etc. are not hereditary but are held for life.

The *Nakas* call themselves *Hada* and are in fact so far we find they worship their deities and engage in various rites of marriage. But there is this great contrast in the worship of the deities that they can fire her and so, and that very cruelly amidst almost savage expressions of joy. They have a peculiar sacrificial post, like that of the *Hindus* in the form of a pole to which the victim is tied hand and foot. It seems they have certain connections with the aboriginal people of the island. They assert that because their deities are cruel in nature, really must be adapted to satisfy them. As the *Nakas* are not scholars they have set up their own shrines at the village border where they worship the deities with all the common formulae. Of their deities the chief are said to be *Naga* and *Makle*. We had once the good luck of seeing the *Naga* or *Pan* in a fairly wide *Pan* being once held by you perhaps similar to our *Sivan* or *Pan*. A dance by the priest and his followers before a fire is a feature of the ceremony. The song of *Ram* is sung accompanied by the sounds of the bell, metals and in steps harmonising with the sounds of the metals. The dance has a burning light. The whole scene is spectacular in the darkness of the night. At the concluding dance the *Hada* leads the chorus.

Now the chief deities have certain followers who are worshipped with the same if not more formal observances. Of these four mentioned *Adi Sakti*, *Kesh Sakti*, *Kamal Sakti*, *Dau Sakti*, *Ank Palama* and *Dharm Sambaram*. It is significant that *Saktism* is evident in their worship. These deities as they say, are not easily appeased. On any emergency the deity is said to demand for blood. In epidemics, famine and drought these deities are propitiated with the sacrifice of hens and pigs in any number. A fine



account of such a ceremony—the sacrifice of the fish—has been given by S. N. K. Bose in *Prakas* (Lanin 1907) where devotion by eggs and wine followed the sacrifice of a fish whose breast is torn open by the hands of the devotee himself. The deity (angeti) are the deities of the ceremony. It must be interesting to note therein that this devotion by means of an egg is a very permissive tract and that devotion of hen must date back to farther remote period—an opinion which Lawrie has drawn from the devotion made by eggs. Somewhat even more cruelly is that with putrefaction in the water of Ankolim tank, where the sacrificial post is fixed on a cart and a pair of pigs are passed through it. Then the people make a procession amidst loud cheers together with the painful cry of the victimised pigs. It seems that such a superstitious ceremony is a custom handed over to them by their more aboriginal Dravidian ancestors.

But it must not be concluded from these ceremonies that the Nohas personally are very evil. On the other hand when you meet the individuals you will find a remarkably polite rather shy, amiable and good-natured gentleman. But physically as can be seen from their measurements they are very muscular, bony and well-built. They have also certain popular deities whom they worship with very simple innocent ceremonies. One such is the village deity Ganga Devi, which means, literally meaning the Goddess Ganges, is really the presiding deity of the sea. This deity is very popular among the Nohas. They firmly believe that if they have satisfied Ganga Devi they have satisfied the great open sea which is the main source of their livelihood.

Labouring and struggling in the mighty waves of the sea for their subsistence the Nohas are seldom long-lived and live very early. But though short-lived, their life is full of work and labour and the individual Noha is never idle. You will always find him at work in the sea-beach or in his village—fishing or working on his net or sometimes mending his boat or weaving or cooking the threads and so on. Even the Noha woman may not depend on her husband but may earn an independent income, as you may often find her working as a day labourer. Apart from their regular profession the Nohas sometimes work as railway coolies or as guides to the fishers and you will always find them fairly and serviceable.



Let me conclude from what we have seen that these east coast fishermen of the Indian Peninsula contribute many interesting ethnological data, and social and religious features which when properly and more fully compared into with, we believe, offer useful analogies with and throw new light on other peoples of India and elsewhere.

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## ANTHROPOLOGICAL PUBLICATIONS

### Books

1. Lectures on Ethnography, by Rao Bahadur L. K. Ananthakrishna Iyer, B.A., L.T., P.R.A.I., 1925, p. 277.
2. The First Outlines of a Systematic Anthropology of Asia, by Prof. V. Giuffrida-Ruggeri. Translated from Italian by Harachandra Chakladar. Re-printed from the Journal of the Department of Letters, Vol. V, 1921.
3. Pre-historic India, by Panchanan Mitra, M.A., Ph.D. (Yale), 2nd Edition, 1927.
4. The Aborigines of the Highlands of Central India, by B. C. Mazumdar, 1927, p. 84.
5. A History of American Anthropology, by Panchanan Mitra, M.A., Ph.D. (Yale), 1933, p. 239.

### Anthropological Papers, University of Calcutta (New Series)

- No. 1. The Hos of Seraikela, by Anathnath Chatterji, M.B.B.S., and Tarakchandra Das, M.A., 1927, p. 94.
- Nos. 2 and 3. The Bhumijas of Seraikela, p. 61; The Wild Kharias of Dhalbhum, p. 38, by Tarakchandra Das, M.A., 1931.
- No. 4. (Reprinted from the Journal of the Department of Letters, Vol. XXVI, 1935.)
- (1) Primitive Religion, Social Organisation, Law and Government amongst the Santals, by P. C. Biswas, M.Sc., Humboldt Fellow, Berlin University, pp. 1-84.
  - (2) An Ethnic Analysis of the Culture—Traits in the Marriage Customs as found among the Rādhīya Brahmins of Mymensingh, by Nirmal Chakrabarti, M.A., pp. 85-164.
  - (3) Races of India, by Bhupendranath Datta, A.M. (Brown), Dr.Phil. (Hamburg).
  - (4) The Khasis, by Tarakchandra Raychaudhuri, M.A., P.R.S., Lecturer, Calcutta University, pp. 249-72.

- (5) Vital Capacity of Bengali Students, by Anathnath Chatterji, M.B.B.S., Lecturer, Calcutta University, pp. 273-77.  
 (6) Os Malare bipartitum in Bengali Crania, by Mr. J. K. Gan, pp. 278-79.

**Anthropological Papers in the Journal of the Department  
of Letters**

**Vol. I (1920)—**

- Pre-historic Cultures and Races in India, by Panchanan Mitra, pp. 113-200.

**Vol. III (1920)—**

5. Pre-historic Arts and Crafts of India, by Panchanan Mitra, pp. 159-224.  
 12. Indo-Aryan Ethnic Origins, by H. B. Hannah, pp. 336-354.

**Vol. IV (1921)—**

1. Indo-Aryan Ethnic Origins, II, by H. B. Hannah, pp. 1-46.  
 3. Vatsyayana—the Author of the Kāmasutra: Date and Place of Origin, by Harachandra Chakladar, pp. 85-122.  
 4. On a Bihar Ceremonial Worship of Totemistic Origin, by Saratchandra Mitra, pp. 123-34.  
 8. The Aryans of India, by Bijaychandra Mazumdar, pp. 271-88.  
 9. On the Karmā Dharma Festival of North Bihar and its Mundā Analogues, by Saratchandra Mitra, pp. 289-304.

**Vol. V (1921)—**

5. The First Outlines of a Systematic Anthropology of Asia, by Prof. V. Giuffrida-Ruggeri. Translated from Italian by Harachandra Chakladar, pp. 167-276.

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13. Races of India, by Ramaprasad Chanda, pp. 295-312.

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Translated from the French by J. K. Gan, pp. 1-13.

**Vol. XXVI (1935)—**

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7. *The Khasis*, by Mr. Tarakchandra Raychaudhuri, pp. 1-24.
8. *Vital Capacity of the Bengali Students*, by Dr. Anathnath Chatterji, M.B.B.S., pp. 1-5.
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**Vol. XXVII (1935)—**

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**Vol. XXVIII (1935)—**

6. *Kinship and Social Organisation of the Purum-Kukis of Manipur*, by Mr. Tarakchandra Das, M.A., pp. 1-14.

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**Vol. V (1923)—**

- Indian Pre-history, with Plates*, by Hemchandra Dasgupta, M.A., F.G.S., 1-8.